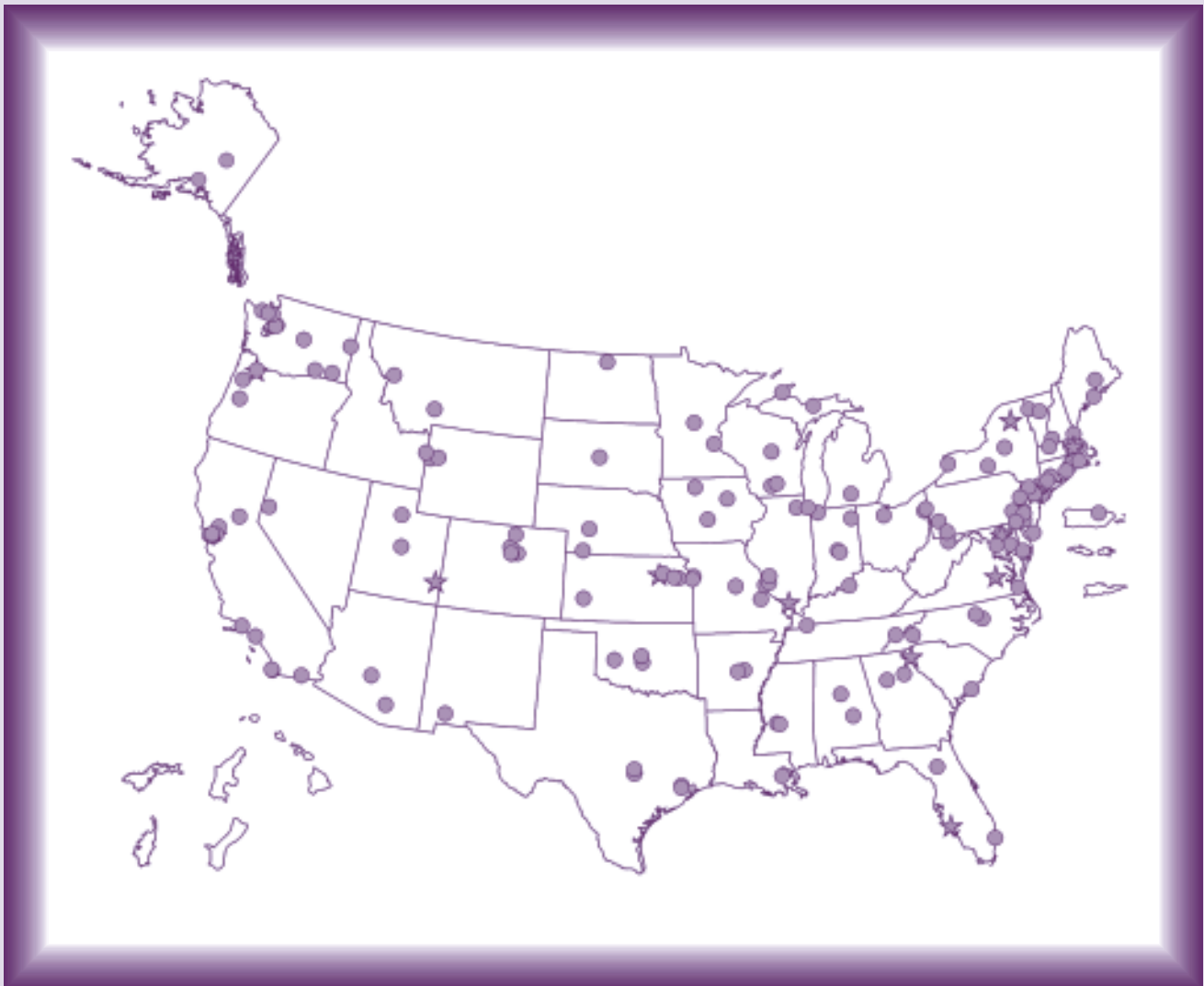




# 2004 Environmental Education Grant Profiles

# 2004 Environmental Education Grant Profiles



U.S. Environmental Protection Agency  
Office of Environmental Education  
Office of Public Affairs  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW (1704A)  
Washington, DC 20460

[www.epa.gov/enviroed](http://www.epa.gov/enviroed)



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# SUMMARY STATEMENT

## ANNUAL GRANTS AWARDED UNDER THE NATIONAL ENVIRONMENTAL EDUCATION ACT (PUBLIC LAW 101-619)

This report summarizes 178 environmental education grants awarded by the U.S. Environmental Protection Agency (EPA) during fiscal year (FY) 2004. The Environmental Education Grants Program was created under Section 6 of the National Environmental Education Act, and the first grants were awarded in 1992. EPA's Office of Environmental Education (OEE) manages the program. Through 2004, grants of federal funds over \$25,000 were awarded annually by EPA Headquarters and smaller grants by the 10 EPA regional offices, as described below. In 2005, the maximum size of the grants awarded by EPA regional offices was increased to \$50,000.

The grants are awarded to stimulate environmental education by supporting projects that address EPA educational priorities such as: state education reform and capacity building, human health, teacher training, career development, and community environmental issues, including those related to environmental justice. The goal of the program is to support projects that enhance the public's awareness and knowledge of environmental issues and the skills they need to make informed and responsible decisions that affect environmental quality. Organizations eligible for grants under the program are: any college or university, tribal or local education agency, state education or environmental agency, nonprofit 501(c)(3) organization, or non-commercial educational broadcasting entity.

In FY 2004, Congress appropriated almost \$2.8 million for the grants program which leveraged more than \$3.4 million in matching funds provided by grant recipients. Because federal funds may not exceed 75 percent of the total funding for a project, each grant recipient is required to provide from their own organization or a partner organization a matching contribution with a value of at least \$1 for every \$3 provided by EPA. As in the current year, the total matching funds leveraged nationwide often exceed the required amount and surpass the total funding provided by EPA. The dollar amounts reported in this document identify the EPA funds awarded to the grantee and do not reflect the matching funds provided by the grant recipients.

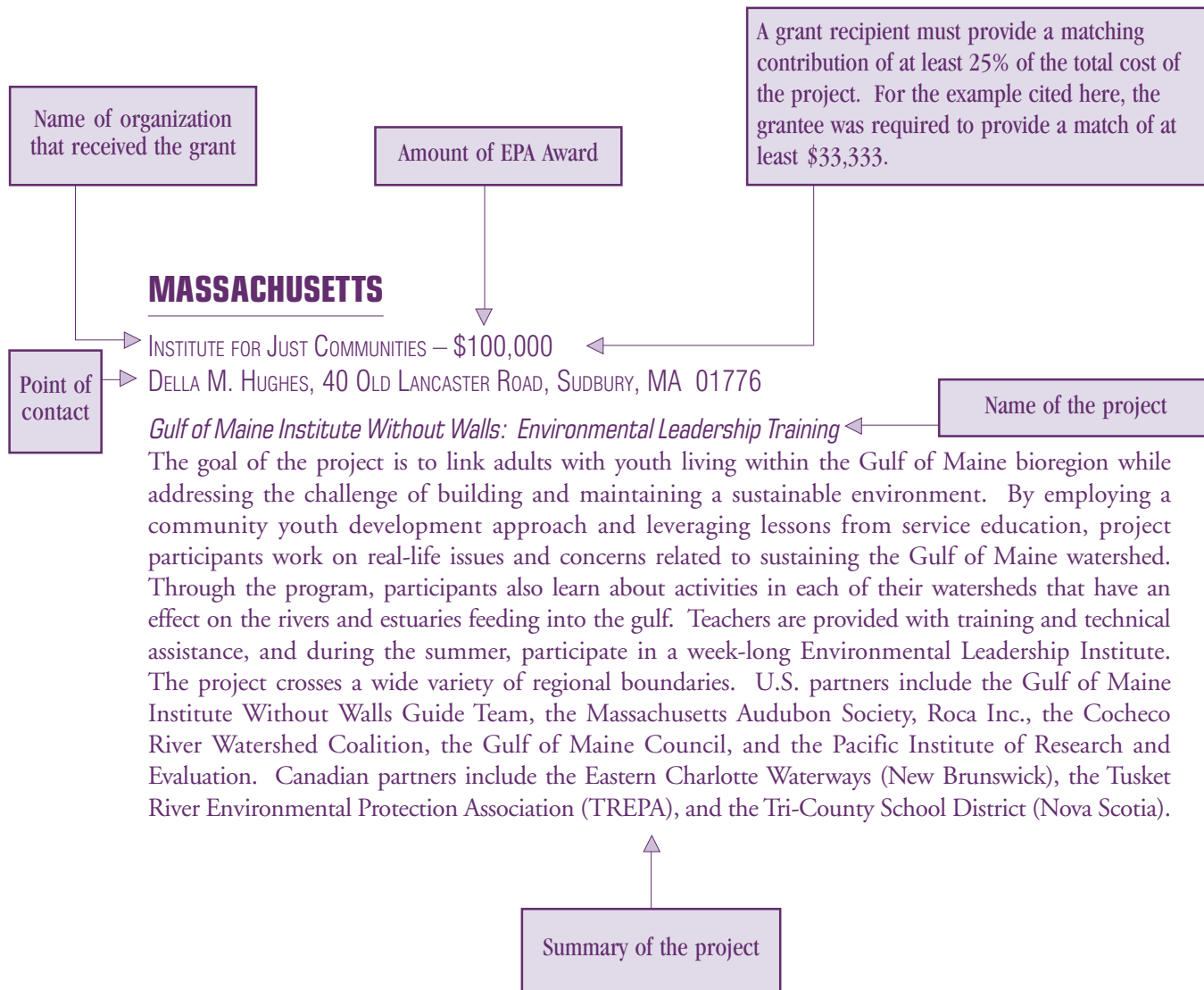
Congress directed EPA to focus on small grants to seed community projects; therefore, the EPA regional offices make small local grants their first funding priority. In total, EPA's 10 regional offices awarded \$1,886,405 for an average of 17 grants per region. In FY 2004, Headquarters funded 9 percent of the 137 grant applications received. Headquarters awarded 12 grants, for a total of \$894,381. Headquarters grants averaged approximately \$75,000; the smallest grant awarded was \$27,963; and the largest awarded was for \$100,000.

EPA's annual Environmental Education Grants Solicitation Notice describes the solicitation, evaluation, and award process through which EPA arrives at final decisions about grant winners. The solicitation notice is published and available for review in the Federal Register. The solicitation notice and application forms may also be viewed online or downloaded from EPA's Web site at [www.epa.gov/enviroed/grants](http://www.epa.gov/enviroed/grants). The most recent solicitation notice also can be obtained by contacting EPA Headquarters or an EPA regional office. A list of EPA contacts is provided on pages 50 and 51 of this document.



## USING THE GRANT PROFILES

The main section of this document provides profiles of environmental education grants awarded during FY 2004. Profiles are listed in alphabetical order by the state or United States (U.S.) territory in which the grant recipient is located. Each profile identifies the organization that received the award, the amount of the award, and a point of contact for the project and presents a summary of the project. Presented below is an actual profile of a grant awarded by EPA Headquarters during FY 2002. This example illustrates the content and format of the profiles contained on the following pages.



# ENVIRONMENTAL EDUCATION GRANTS AWARDED BY EPA HEADQUARTERS

## California

REDEFINING PROGRESS — \$79,030

DAHLIA CHAZAN, 1904 FRANKLIN STREET, 6TH FLOOR, OAKLAND, CA 94612

### *The Shadow We Cast: Strengthening Environmental Education with the Ecological Footprint*

The goal of this project is to help teachers develop skills and knowledge that they can integrate into their classroom instruction on the scientific and social aspects of society's use of renewable resources. The project is based on the use of the Ecological Footprint™ analysis. Footprint, which was developed by Redefining Progress, is a tool for measuring sustainability. The project builds on two earlier phases that focused on the study of use of the Footprint in the classroom and development of educational materials. For this project, more than 100 geography and social studies teachers for grades 5 through 8 in California are trained in the use of Footprint training materials. Lesson plans and other materials are made available to educators at workshops and at a national conference. An online community for teachers also provides support for teachers across the state. Partners of the project include Creative Change Educational Solutions and the California Geographic Alliance.

## Florida

CHARLOTTE COUNTY SCHOOL DISTRICT — \$27,963

JACKIE SPEAKE, 1445 EDUCATION WAY, PORT CHARLOTTE, FL 33948-1053

### *Charlotte's Watershed and Tidal Estuarine Research (Charlotte's W.A.T.E.R.)*

Designed for environmental and marine science high school students in the Charlotte County School District in Florida, the Watershed and Tidal Estuarine Research (W.A.T.E.R.) project enables teachers to take students into the field to conduct investigations of local ecosystems and to collect and analyze data over time. Teachers attend a workshop prior to field work in order to develop field activities and define the scope of the data collection and analysis. In the classroom, students analyze data by applying the scientific method, using graphs and charts, writing in scientific journals, and conducting research on the history of local ecosystems. The data are shared by the four participating high schools, the scientific community, and the public on a Web site. Through their research-based field studies, students develop inquiry-based learning and team-building skills. Approximately 900 students, most of whom participate in federal free and reduced-cost lunch programs, are the target audience for the project. A key partner in this project is the Charlotte Harbor Environmental Center.

## Illinois

CENTER FOR INSTRUCTION, STAFF DEVELOPMENT AND EVALUATION — \$98,835

TRUDI VOLK, 1925 NEW ERA ROAD, CARBONDALE, IL 62901

### *EE Leadership Project*

In an effort to expand the number of teachers trained and qualified to use the Investigating and Evaluating Environmental Issues and Actions (IEEIA) curriculum, the Center for Instruction, Staff Development and Evaluation (CISDE) is conducting a 6-day national workshop for 30 teachers and EE professionals with outstanding leadership abilities. IEEIA, an instructional model designed to help teachers understand the inquiry-based process of investigating environmental issues, trains teachers to better incorporate inquiry-based learning techniques into their EE programs. The teachers and EE professionals then plan and conduct 10 to 12 regional workshops in order to instruct approximately 250 teachers and environmental educators in how to use the IEEIA curriculum. The IEEIA-trained educators reach approximately 3,000 students across the nation who benefit from instruction in the development of critical thinking and decision-making skills. Key project partners are the Department of 4H and Youth Programs and the University of Florida.



## Kansas

KANSAS ASSOCIATION FOR CONSERVATION AND ENVIRONMENTAL EDUCATION – \$38,650  
LAURA DOWNEY, 2610 CLAFIN DRIVE, MANHATTAN, KS 66502-2743

### *Professional Development for Kansas Leaders*

Through professional development opportunities, use of a planning workshop, and implementation of pilot projects, this project establishes a framework that enables state and local leaders in communities across Kansas to make informed decisions on matters that impact the environment. Following a 2-day professional development seminar intended to increase participants' skills in using the framework for making environmental decisions, the participants work in small groups to develop projects for sharing the lessons of the seminar and the environmental decision-making framework with other state and local leaders involved in making decisions that concern and affect the environment. Through the use of subsequent pilot projects, the project involves more than 100 participants across the state and serves as the basis for the development of the Plan for Environmental Education and Decision-making for Kansas Leaders. Partners for the project include Kansas State University Research and Extension (KSU R&E), Office of Local Government; the Kansas PRIDE, a cooperative program of the Kansas Department of Commerce and KSU R&E; the KSU R&E Leadership Excellence And Dynamic Solutions (LEADS) team; and the Kansas Environmental Leadership Program (KELP).

## Maryland

LIVING CLASSROOMS FOUNDATION – \$53,110  
CHRISTINE TRUETT, 802 S. CAROLINE STREET, BALTIMORE, MD 21231

### *C2K Bay S.T.A.R.*

The Students, Teachers, Academics, Restoration (S.T.A.R.) project involves approximately 10 teachers and 400 students in grades 4 through 8 in the restoration of Maryland's tidal wetlands to support the Chesapeake Bay 2000 (C2K) Agreement. The C2K Agreement, an important element of Maryland's educational reform initiatives, engages students and their teachers in protection and restoration of the Chesapeake Bay. Teachers participate in a 2-day workshop to learn more about the educational requirements of the C2K Agreement and how to incorporate Chesapeake Bay watershed issues into their curricula. The students, who represent an at-risk and low-income community, participate in land and sea programs both at a maritime museum and on an historic skipjack, where they conduct experiments, explore Chesapeake Bay ecology, discover the history of the area, and use teamwork to crew the sailboat. In the classroom, students grow and care for native wetland grass seedlings that they later plant as part of a local restoration project. Project partners include the Maryland State Department of Education, the EcoLogix Group, Environmental Concern, the Chesapeake Bay Maritime Museum, and the Maryland Department of Natural Resources.





## Massachusetts

THE URBAN ECOLOGY INSTITUTE, INC. — \$97,800

CHARLES LORD, 355 HIGGINS HALL, 140 COMMONWEALTH AVENUE, CHESTNUT HILL, MA 02467

### *The Urban Ecology Collaborative*

This project implements a multistate vision for EE programs for urban youth in kindergarten through grade 12 by building the capacity of the Urban Ecology Collaborative (UEC). UEC is a partnership of state agencies, nonprofit organizations, and public schools in Boston, Massachusetts; New Haven, Connecticut; New York City, New York; Baltimore, Maryland; Pittsburgh, Pennsylvania; and Washington, DC, that are working to coordinate the delivery of EE programs to urban youth. During the project, UEC representatives oversee a strategic planning process, conduct an inventory of EE programs across each of the six UEC cities, link EE programs within and between the UEC cities, and foster efforts related to capacity-building and improved outreach. This collaborative project is the first of its kind to address the pedagogical needs of urban students from an EE perspective. Key project partners are the Boston Public Schools, the Urban Resources Initiative, the New Haven Ecology Project and Common Ground High School, the Institute for Ecosystem Studies, the Baltimore Ecosystem Study, the Parks and People Foundation, the Casey Trees Endowment Fund, the Schoolyard Greening Consortium, the Green Education Movement, and Conservation Consultants, Inc.

## New Jersey

STEVENS INSTITUTE OF TECHNOLOGY — \$85,373

EDWARD A. FRIEDMAN, CASTLE POINT ON THE HUDSON, HOBOKEN, NJ 07030

### *Do Particulates Matter?*

“Do Particulates Matter?” is an Internet-based science curriculum for students in grades 6 through 12 that raises awareness of environmental and health hazards posed by fine particle pollution. Using real-time data downloaded from EPA’s AirNow Web site, students in New Jersey, New York, Florida, Ohio, and Arizona collect, record, and analyze particulate matter data. By conducting “real world” scientific investigations, the students are learning firsthand about air quality issues. The project also targets a small subset of teachers who attend workshops to learn about current air quality issues, particularly as they relate to particulate matter; how to use the air quality curriculum materials in their classrooms; and how to train other teachers to use the curriculum. At the end of the project, the Particulates Matter curriculum will be available on the Internet for use by schools across the country and will be distributed at national and regional conferences and workshops attended by thousands of educators. The Institute for Learning Technologies at Columbia University’s Teachers College is a key partner of the project.





## New York

NATURAL HISTORY MUSEUM OF THE ADIRONDACKS – \$74,180  
VALERIE TRODEAU, P.O. Box 897, TUPPER LAKE, NY 12986

### *Loon Migration: Linking People and the Environment*

The loon is used as an educational topic for this project because of its popularity in this region. The project teaches the public about environmental factors, such as mercury pollution and acid rain, that affect aquatic ecosystems in eastern North America. Through this project, the public gains an understanding of the links between loon breeding, migratory, and wintering areas and learns how environmental issues in one area can affect wildlife species, such as the loon, throughout their migratory range. Various delivery methods, including an interactive Web site; public programs; curricula about loon natural history, loon migration, and environmental impacts on loon populations; teacher training programs; and media materials, are used to actively engage students, teachers, and the general public in the project. The audience for the project includes Adirondack Park residents, visitors, school children, and teachers as well as members of the general public along the eastern United States who live in the migratory and wintering range of Adirondack loons. Partners collaborating on the project include the Adirondack Cooperative Loon Program, Wildlife Conservation Society, New York State Department of Environmental Conservation, BioDiversity Research Institute, Audubon Society of New York, and U.S. Geological Survey.

## Oregon

PORTLAND STATE UNIVERSITY – \$86,400  
PORTLAND STATE UNIVERSITY, CRAMER HALL, PORTLAND, OR 97201

### *The FEED Project: Food-based Environmental Education Design*

Grant funds are used to provide seed money to three competitively selected elementary schools that establish Environmental Education Councils (EECs) which bring together school administrators, teachers, parents, students, and community members to generate schoolwide environmental programs. The EEC in each school creates a food- and project-based EE curriculum specifically tailored to the needs of the school. Students, many of whom represent low-income and minority communities, learn how growing food, preparing and eating meals, composting and recycling, and buying food from local sources are intertwined with environmental issues. Participating teachers attend 15 workshops on agriculture, food, and nutrition and learn how to incorporate garden- and food-based learning into their lesson plans. The project reaches approximately 150 children in grades 4 and 5, their parents, and 20 elementary school teachers. The project, while focused on improving student achievement in mathematics and science, also encourages environmentally responsible decision-making by students, parents, and teachers. The project partners are the Portland International Initiative for Leadership in Ecology, Culture, and Learning; Oregon Tilth; 47th Avenue Farm; and Friends of Zenger Farm.



## South Carolina

CLEMSON UNIVERSITY – \$62,540

LYNN KUNKLE, OFFICE OF SPONSORED PROGRAMS, BOX 345702, 300 BRACKETT HALL, CLEMSON, SC 29634-5702

### *Reducing Pesticide Risk through Education*

Building on a previous grant project conducted by Clemson University, this project introduces children in kindergarten through grade 5 to the basic concepts of integrated pest management (IPM). The project's intention is that the children will be less likely to be unnecessarily exposed to pesticides and that as adults, they will be more likely to use nonchemical pest management practices. As part of the project, teachers from two elementary schools attend local workshops to receive training in IPM and learn how to incorporate IPM education into their curricula. The training is also offered to all kindergarten through grade 5 teachers in South Carolina at eight Math and Science Centers where teacher recertification training in math and science is conducted. An ultimate goal of the project is to promote statewide adoption of IPM as part of the state's science curriculum standards for elementary school children. Project partners include the two participating elementary schools and the South Carolina Department of Education.

## Utah

FOUR CORNERS SCHOOL OF OUTDOOR EDUCATION – \$100,000

JANET ROSS, P.O. BOX 1029, MONTICELLO, UT 84535

### *Teacher Retention and Renewal through Bioregional Outdoor Education*

In an effort to build capacity as well as improve teacher retention and renewal, this project enhances the skills of elementary school math and science teachers in the four states of the Colorado Plateau Bioregion. Throughout the 2-year project, more than 200 teachers participate in professional development activities, including workshops, field activities, and a 10-day summer institute. The teachers can then adapt their math and science outdoor education skills and curricula to better reflect issues and concerns that are unique to the plateau bioregion. Students in 24 elementary schools on the Colorado Plateau are the key audience for the project. The students represent a diverse, low-income community composed primarily of Native Americans along with Hispanics and Caucasians. Partners for the project include the Utah Society for Environmental Education; the National Science Foundation; the Eastern Navajo Bureau of Indian Affairs; school districts in New Mexico, Arizona, Utah, and Colorado; and the Colorado School of Mines.

## Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY – \$90,500

ANN REGN, P.O. BOX 10009, RICHMOND, VA 23240-0009

### *Virginia Naturally: Statewide Environmental Education*

This project implements the Virginia Office of Environmental Education's strategic plan for building EE capacity in Virginia. In focusing on community-based programs, the project builds state capacity for EE by expanding on previous efforts to establish an effective leadership network and funding sources and to develop a programmatic infrastructure that supports community-based initiatives. To reach the target audience of community-based organizations in Virginia, grant funds are used to maintain and expand the network of EE partner organizations; nurture collaboration between partners in the network; and provide information, training, and programmatic assistance to community-based EE organizations. The project involves use of a wide array of education and communication techniques, such as monthly electronic newsletters, a Web site, regional forums, workshops, and a statewide conference. Partners in this project include the Virginia Resource-Use Education Council, an interagency committee with representatives from 26 federal, state, and local education and natural resource agencies; Smithfield Foods; and the Virginia Environmental Endowment.



# GRANTS AWARDED BY EPA REGIONAL OFFICES

## Alabama

ALABAMA FORESTRY FOUNDATION — \$5,000

RICK OATES, 555 ALABAMA STREET, MONTGOMERY, AL 36104

### *36th Teachers Conservation Workshop*

In this project, the Alabama Forestry Foundation hosts a 5-day workshop for teachers designed to give them a better understanding of the role that Alabama's forest ecosystems play in protecting other parts of the environment. The workshop makes use of field trips as well as guest speakers. The workshop also incorporates Project Learning Tree, Legacy, the GLOBE program, and other environmental curricula. Topics discussed include endangered species, water quality, soils, the importance of fire in an ecosystem, and energy conservation. The teachers are given field trip guides, papermaking kits, and leaf identification kits that they can use to teach their students about forest ecosystems.

FRIENDS OF WINNATASKA, INC. — \$23,990

ELLEN B. BUCKNER, 1524 SHADES CREST ROAD, BIRMINGHAM, AL 35226

### *Winnataska Consortium for Teacher Education in Environmental Studies*

The purpose of this project is to initiate a consortium for teacher education in environmental studies at Camp Winnataska. While setting up an office at the camp site, Friends of Winnataska, Inc., revised the camp waste management services to offer recycling. This organization is providing materials to support the consortium workshops on site. The workshops, 12 for teachers and 2 for students, address biology, chemistry, ecology, geology, geography, and environmental education.

## Alaska

ALASKA NATURAL RESOURCE AND OUTDOOR EDUCATION ASSOCIATION — \$10,530

COURTNEY SULLIVAN, P.O. BOX 871528, WASILLA, AK 99687-1528

### *Environmental Education Across Alaska*

Under this grant, the Alaska National Resource and Outdoor Education Association helps to develop environmental education leaders in the state. Alaska faces special challenges to environmental education, including great travel distances, high teacher turnover rates, cultural diversity issues, and other factors that are unique to the state. The project focuses on three specific components identified by the National Environmental Education Advancement Project as being important for a comprehensive environmental education program at the state level: (1) conducting educator training at regional conferences in Anchorage and Fairbanks; (2) establishing a statewide, interagency environmental education committee; and (3) developing a statewide resource guide. The goal of the project is to increase the effectiveness of environmental education efforts across the state through coordinated and effective partnerships. The project reaches nearly 500 environmental educators in the state, including state and federal government, university and formal and nonformal educators.



CALYPSO FARM AND ECOLOGY CENTER — \$20,000  
LEAH SANSONE, P.O. Box 106, FAIRBANKS, AK 99725

### *Employing Alaskan Teens in Gardening*

Employing Alaskan Teens in Gardening (EATinG) educates a culturally diverse population of students about sustainable agriculture and offers low-income teens environmental career options. The goal of the project is to use sustainable farming practices to develop a network of gardens in the Fairbanks School District and to involve students in every aspect of the process. The project serves students by providing garden-based lessons inside and outside the classroom, conducting the EATinG employment program, maintaining a student hiring committee, and conducting field trips and training at the Calypso Farm and Ecology Center. Teachers enhance the students' understanding by integrating lessons learned into their classroom discussions. EATinG incorporates environmental education, environmental justice, nutrition, science, math, and English studies.

## Arizona

SONORA ENVIRONMENTAL RESEARCH INSTITUTE, INC. — \$5,000  
ANN MARIE WOLF, 3202 EAST GRANT ROAD, TUCSON, AZ 85716

### *Environmental Education Center for Rillito, Arizona*

The town of Rillito is disproportionately affected by pollution from a number of sources. The major issue facing the town is air pollution generated by a local cement plant. The residents believe that they lack the information needed to make informed decisions about their environmental future. The project, which is a result of a partnership between the town residents and Sonora Environmental Research Institute, Inc., involves establishing the Rillito Environmental Education Center. The center provides a variety of educational opportunities, including workshops, an after-school program for local students, and volunteer activities. The project aims to increase the decision-making abilities of community members and provide them with the skills needed to critically analyze the air quality issues affecting them.

SOUTHWEST CENTER FOR EDUCATION AND THE NATURAL ENVIRONMENT — \$15,968  
KATHRYN KYLE, P.O. Box 873211, TEMPE, AZ 85287-3211

### *Inquiry Teacher Training Model*

The purpose of this project is to develop and pilot a model for training teachers to conduct open-ended science inquiries with their students on school grounds while focusing on the local ecology and other environmental topics. State and national science standards require that science be taught as a process of inquiry, but most teachers are not equipped to teach science as inquiry. The project addresses how best to train teachers so that they are able to provide authentic inquiry experiences for their students without needing outside "experts" to lead those experiences and model them for the teachers over a long period.

## Arkansas

CENTRAL ARKANSAS PLANNING AND DEVELOPMENT DISTRICT — \$7,544  
LEIGH ANN COVINGTON, 115 JEFFERSON STREET, P.O. Box 300, LONOKE, AR 72086

### *Environmental Education Program for Floodplain Management*

Under this program, the Central Arkansas Planning and Development District is conducting environmental education workshops for local floodplain managers. Areas covered by the workshop include floodplain-related education, proper floodplain management, and possible mitigation projects for housing located within floodplains. In addition, floodplain education projects are being scheduled for public schools in six counties, and floodplain management presentations are being delivered to civic clubs in the six-county area. Low-income, minority communities are a major focus of the program, as these communities are at the greatest risk of living in housing in flood-prone areas. School-age children are provided with interactive computer programs that use flooding scenario models.



CENTRAL ARKANSAS PLANNING AND DEVELOPMENT DISTRICT — \$5,000  
CAROL BEVIS, 115 JEFFERSON STREET, LONOKE, AR 72086

*Greta Green Environmental Education Program*

As part of this program, the Central Arkansas Planning and Development District is providing interactive presentations and workshops for over 52,000 students, teachers, and community groups to educate them about recycling, composting, proper disposal of household chemicals, and the adverse effects of littering. The presentations are designed to provide both children and adults with information on community environmental issues, health issues, and teacher training and can easily be used as models. The central focus of the workshops is “Greta Green,” a character representing recycling who is used to explain the importance of developing good environmental habits. Teachers take the lessons learned from the presentations and incorporate them into regular classroom curricula. Posters, textbooks, and related materials are given to the teachers for use in their classrooms. In addition, the District helps the teachers’ schools to implement school-based recycling programs.

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE — \$20,000  
BURNETT KESSNER, 2301 S. UNIVERSITY AVENUE, PULASKI, AR 72203

*Nature Mapping Project for Home-Schooled Youth*

In this project, home-schooled young people participate in an intensive, 12-week winter session to learn about Nature Mapping, a data collection and monitoring program that they can use to keep track of natural events by mapping what they observe. The goals of the project are to meet the science education and life skill development needs of home-schooled youth. The session incorporates experiential, science-based activities that correspond with the state science curriculum framework, which consists of physical systems, life science systems, earth and space systems, and 4-H life skill-based experiential activities.

## California

*See page 3 for a profile of a grant awarded to Redefining Progress by EPA Headquarters.*

BAY AREA WILDERNESS TRAINING — \$8,000  
KYLE MACDONALD, 300 BROADWAY, SUITE 28, SAN FRANCISCO, CA 94133

*Wilderness Leadership Training and Environmental Stewardship Education*

Bay Area Wilderness Training (BAWT) trains education leaders, supplies wilderness gear, and provides urban youth with opportunities for educational and life-changing experiences. The core program includes a Wilderness Leadership Training course and supplementary 1-day seminars in first aid, cardiopulmonary resuscitation, and use of a map and compass for adults who work with urban youth. In 2003, BAWT initiated three new programs, including a Youth Wilderness Leadership Training course modeled on the adult course and a 3-day Mt. Diablo Complete course held for adults in the Bay area and designed to be easily replicated with young people.

COMMUNITY RESOURCES FOR SCIENCE — \$20,024  
ANNE JENNINGS, 1375 ADA STREET, ALAMEDA, CA 94702

*Environmental Learning Partnership*

The purpose of the Environmental Learning Partnership project is to help both classroom teachers and non-formal educators maximize and measure the impacts of environmental education on elementary school students. As part of the project, 40 teachers and 20 environmental education program providers are being trained to effectively integrate environmental education into elementary school curriculums in order to provide thousands of students with more engaging environmental learning experiences.



EARTH TEAM — \$5,000  
SHEILAH FISH, P.O. BOX 4686, WALNUT CREEK, CA 94596

*Earth Team Restoration Initiative*

The Earth Team Restoration Initiative (ETRI) is a project-based learning program designed to involve high school students in local habitat restoration projects. Through ETRI, students are educated about the environment and habitat restoration in the context of their local watershed and natural community, and provided with opportunities to take action as environmental stewards. ETRI bridges the gap between teachers, young people, and community organizations by reaching out to schools and linking them to local service projects.

IMPERIAL VALLEY REGIONAL OCCUPATIONAL PROGRAM — \$23,109  
MADALEINE O. MACHOLTZ, 687 STATE STREET, EL CENTRO, CA 92243

*Imperial Valley Student Entrepreneurs for Recycling*

The Imperial Valley Student Entrepreneurs for Recycling program raises students' awareness about recycling and resource management to improve their overall academic performance. Another goal of the program is to help students explore environmental careers and find ways to make positive contributions to the local environment. As part of the program, middle and high school teachers are being trained using the California Integrated Waste Management Board's "Closing the Loop" curriculum guide. The teachers work with six middle and high school groups to develop school-based recycling businesses. Information about the students' efforts is disseminated throughout the community. The target audience for this grant includes students from a low-income, culturally diverse, rural community.

INNER CITY BUSINESS ASSOCIATION — \$24,015  
JAMES JUSTUS, 2208 IMPERIAL AVENUE, SAN DIEGO, CA 92102

*Negocio Verde Project*

The Negocio Verde project links college students with owners of small automotive businesses through multi-media educational workshops that focus on pollution prevention in the underserved minority population centers of San Diego and National City. The goal of the project is to provide cross-media education and skills to owners of small businesses in environmental justice communities in order to help them make environmentally responsible choices that also bring cost savings. The college students meet with the owners of small automotive businesses, participate in the workshops, and gain important experience in interacting with the owners of small businesses. The multi-media workshops use the San Diego Area Green Business Automotive Self-Audit Checklist and educate both the business owners and students about pollution prevention.

NATIONAL WILDLIFE FEDERATION — \$10,721  
STEPHANIE STOWELL, 3500 5TH AVENUE, SUITE 101, SAN DIEGO, CA 92103

*Community Workday for Wildlife*

The National Wildlife Federation (NWF) is launching a Community Workday for Wildlife, which is part of the larger Community Wildlife Habitat Initiative. NWF engages Los Angeles urban, low-income neighborhoods in long-term environmental education regarding water conservation, air pollution, and local wildlife and habitat. As part of this effort, the project is helping residents create habitats by building bird baths, rockpiles, and bat homes and planting native plant species around their homes, schools, businesses, and other community locations. The results of the project include a growing network of functioning wildlife friendly habitats throughout the community and increased resident awareness about community environmental health.





PLACER LAND TRUST & NATURE CENTER — \$4,550  
LINDA DESAI, 3700 CHRISTIAN VALLEY ROAD, AUBURN, CA 95602

#### *Waste Busters*

In this project, the Waste Busters program will be added to the Environmental Science Travels (EST) program, which is a set of five interactive programs for elementary school students that brings environmental science into the classroom. Subjects of the EST program include water resources; recycling; food chains; and birds, bats, and bugs. For example, the Water Basins program enhances middle school science curriculums by making connections between the physical science concepts that students learn about in the classroom and the energy and natural resources that they use in everyday life. Although a traditional science curriculum addresses the concepts of energy and its application, it does not make energy issues personal for students. The EST program connects the concepts taught in the classroom with students, their homes, and their community. Thus, the program offers students a fuller understanding of energy and natural resources and their application in every aspect of the students' lives.

PROJECT UNDERSTANDING — \$2,400  
LYNN AUSTIN, 43 EAST VINCE STREET, VENTURA, CA 93001

#### *This Land Is Your Land*

Using volunteer tutors, the This Land Is Your Land program helps students improve their academic performance, learning skills, self-esteem, and motivation. Students learn about key environmental issues by creating a land-use map for the county. The program gives each student a basic understanding of the various uses that compete for land in the county. As a result of the program, students are better able to interpret the news and events of the day that presumably involve changes in the local environment and to form their own conclusions.

SAVE SAN FRANCISCO BAY ASSOCIATION (SAVE THE BAY) — \$20,000  
JASON MORRIS, 1600 BROADWAY, SUITE 300, OAKLAND, CA 94612

#### *Wetland Restoration and Bay/Watershed Education Programs*

Save the Bay began its Canoes in Sloughs Watershed Education Program in 1996 to address a lack of San Francisco Bay-related experiential education for middle and high school students. The program combines hands-on bay wetland restoration activities with educational canoe trips, in-class sessions, teacher training, and use of the program's San Francisco Bay Watershed Curriculum. The students learn to identify non-native plants, collect native seeds, and test water quality while building their knowledge of and connections to the bay and the community as well as help to improve water quality and wildlife habitat.

SOLANO LAND TRUST — \$5,000  
KAREN SWAN, 744 EMPIRE STREET, SUITE 112, FAIRFIELD, CA 94533

#### *Young Stewards*

Solano Land Trust's Young Stewards watershed education program helps fourth-grade students and their teachers become stewards of their watershed and sets stewardship examples for their families and community. Students and teachers discover what a watershed is, how the water cycle works, what pollution is, and where pollution comes from. They also learn about wetlands.





VENICE HIGH SCHOOL — \$15,077

JULIE MANN, 13000 VENICE BOULEVARD, LOS ANGELES, CA 90066

### *The Learning Garden Composting Demonstration Site*

The Venice High School Learning Garden includes a functional and educational composting demonstration site that serves as a learning center for students and community members. The Learning Garden is a green waste reduction post for the high school and surrounding neighborhoods, and it produces rich soil amendment for its own use. The goal of the project is to incorporate the theory and practice of composting into the school system and the curriculum by utilizing existing environmental education materials. Local businesses are encouraged to compost their wastes at the site. Weekend workshops are held every two months targeting different areas of the community. The workshops educate residents about composting options and landfill issues. Through community use of the composting site, participants learn how to reduce the amount of waste being landfilled while producing a beneficial soil amendment that can be used to green their homes and neighborhoods.

YOUTH EMPLOYMENT PARTNERSHIP, INC. — \$10,000

MICHELE CLARK, 2300 INTERNATIONAL BOULEVARD, OAKLAND, CA 94601

### *Team Oakland Environmental Training Program*

The Team Oakland Environmental Training program is a 6-month employment training and education program that provides 100 high-risk, low-income young people (ages 14 through 17) with paid employment in environmental cleanup and beautification projects. The program provides the participants with environmental education, field trip experiences, and opportunities to develop environmental leadership skills. More than 90 percent of the program's participants are people of color who live in households at or below the federal poverty level. The program is specifically designed to meet their needs and to enable them to understand the critical connection between their urban environment and the surrounding coastal, marine, and wilderness environment.

## **Colorado**

COLORADO ALLIANCE FOR ENVIRONMENTAL EDUCATION — \$15,000

ALI GOULSTONE, 15260 S. GOLDEN ROAD, GOLDEN, CO 80401

### *Colorado Environmental Education Competencies Project*

The Colorado Environmental Education Competencies Project enhances quality assurance measures designed to improve the effectiveness and consistency of environmental education programs in Colorado. This project defines specific performance standards and requisite skills for environmental education program managers and instructors. Through training programs, the managers and instructors learn to assess their own level of environmental education competency and identify means to improve it. The project also helps to ensure that the instructors meet the same high standards of professional excellence that are expected for the design of environmental education programs and materials. This project follows specific guidelines issued by the North American Association for Environmental Education (NAAEE) as part of the National Project for Excellence in Environmental Education.



COLORADO ENERGY SCIENCE CENTER — \$5,000

SUSAN TOTH, 1767A DENVER WEST BOULEVARD, SUITE 49, GOLDEN, CO 80401

*An Energy Education Initiative for Elementary Students and their Families*

The Colorado Energy Science Center (CESC) is expanding its kindergarten through grade 12 energy education initiative to reach 2,500 fourth- and fifth-grade students; their families; and 100 teachers with the Energy Hog Traveling Road Show Program. The Energy Hog Education Kit offers activities that provide an interdisciplinary context for learning about energy. The kit is correlated with the Colorado Model Content Standards for science, math, reading, and writing. The program components include an Energy Hog Education Program that demonstrates how energy is wasted in homes and schools and presents ways to avoid high energy bills. Students, family members, and teachers participate in activities that include 15 modules of investigational learning. CESC's goal is to conduct at least 100 classroom programs on energy efficiency for fourth- and fifth-grade students at schools throughout the Denver metropolitan area and to hold related assemblies as evening family events at five of the participating schools.

COLORADO RENEWABLE ENERGY SOCIETY — \$17,960

SHEILA TOWNSEND, P.O. BOX 933, GOLDEN, CO 80402

*Renewable Energy and Green Building Education Program*

This program increases public knowledge and awareness of both renewable energy and various "environmentally superior" green building products and practices that have been successfully and economically used in homes, schools, and commercial buildings across Colorado. The program consolidates existing educational materials and provides training to organizers, teachers, the general public, and the building community. This program has a positive impact on the use of solar power and green materials in Colorado. Kindergarten, elementary, middle, and high school educators attend two training workshops, including an annual training workshop, which train them to integrate the Renewable Energy and Green Building Education Program material into existing science curriculum.

ENVIRONMENTAL LEARNING FOR KIDS — \$22,000

STACIE GILMORE, 14460 EAST 50TH AVENUE, DENVER, CO 80239

*Denver Youth Naturally Program*

Environmental Learning for Kids (ELK) is a non-profit, community-based organization that offers education and training to underserved young people in the Denver metropolitan area. ELK's environmental science program is correlated with the Colorado State Standards for Education and uses interdisciplinary curricula. During the formal classroom training, students learn about water quality testing and wildlife conservation. In this program, classroom training for the students is supplemented with field trips to visit environmental science professionals. These field trips provide the students the opportunity to discuss science careers with environmental science professionals.

NATIONAL WILDLIFE FEDERATION — TRIBAL LANDS — \$14,000

TAHLIA BEAR, 2260 BASELINE ROAD, SUITE 100, BOULDER, CO 80302

*Ute Tribe Wildlife Habitat Project*

The National Wildlife Federation, in partnership with the Ute Tribal Lands Associate Coordinator, provides training for tribal educators working at three reservation schools. The training focuses on environmental issues concerning the reservation. The Ute Tribe Wildlife Habitat project provides tribal educators with environmental education tools that enhance the class curricula for over 150 Native American students. Key project partners include the Southern Ute Indian Academy in Ignacio, Colorado, and the Ute Mountain Head Start Programs in Towaoe, Colorado, and White Mesa, Utah. The project may lead to an extension of the partnership to the Prairie Band of Potawatomi in Kansas and the Pierre Indian Learning Center in South Dakota.



TREES, WATER AND PEOPLE — \$8,000

RICHARD FOX, 633 REMINGTON STREET, FORT COLLINS, CO 80524

*Pine Ridge Alternate Energy Education and Training Program*

Trees, Water and People (TWP) is a non-profit organization that educates Lakota youth on the Pine Ridge Reservation about alternative energy sources. Because 70 percent of the Lakota community's income is used to heat homes on the reservation, TWP is conducting a training program designed to teach students and their families about energy alternatives that are environmentally sound, culturally appropriate, and economically beneficial. The objectives of this program are to provide environmental and alternative energy education and training; conduct specific technology and skill training for students who are interested in pursuing alternative energy careers; and offer service learning programs designed to provide hands-on training, raise community awareness of alternative energy sources, and help underserved groups reduce their energy costs.

## Connecticut

PROGRESSIVE TRAINING ASSOCIATES, INC. — \$4,998

WARREN GODBOLT, 965 FAIRFIELD AVENUE, BRIDGEPORT, CT 06605

*Project PEEAL (Parent Empowerment and Education About Lead)*

This project is expanding an existing program that provides education about lead poisoning for low-income families in Bridgeport, which has the highest number of lead poisoning cases in the state. The project is aimed specifically at providing services for parents who are re-entering the community after incarceration and who have children under the age of 6 years.

SEA RESEARCH FOUNDATION, INC. — \$20,104

INGRID WALKER, 55 COOGAN BOULEVARD, NEW LONDON, CT 06355

*Protecting the Jewel in Our Backyard: The Long Island Sound Curricula Outreach Program*

This project is developing a week-long summer institute for approximately 30 teachers of grades 5 and 6 in the New Haven public schools. The institute focuses on critical issues facing Connecticut's marine ecosystems and features outdoor field experiences, hands-on activities, interactive workshops, presentations, and discussions. The workshops and presentations are aimed to enhance the teachers' understanding of marine science.

SOLAR YOUTH, INC. — \$14,000

STEPHANIE BERGMAN, 425 WEST ROCK AVENUE, NEW HAVEN, CT 06515

*Hands-on Outdoor Learning Adventure (HOLA) Program*

This is a school program that provides hands-on, outdoor learning opportunities to students in grades 4 and 5 from a low-income urban community. The program emphasizes the scientific benchmarks in the New Haven Public School Standards and helps students to understand that their personal choices can affect the environment. The students participating in this program increase their scientific achievement while developing the knowledge, attitude, skills, and commitment to integrate environmental ethics into their lives.



## Delaware

DELAWARE ECUMENICAL COUNCIL ON CHILDREN AND FAMILIES — \$9,870

ROBERT P. HALL, 240 NORTH JAMES STREET, SUITE B1B, WILMINGTON, DE 19804

### *Environmental Education in Faith-Based Communities*

The Delaware Ecumenical Council on Children and Families works through faith-based community organizations to educate people about critical environmental issues, including air quality, water quality, and problems related to land use and industrial pollution. By disseminating educational materials to congregation and community leaders and conducting workshops for parents of small children, caregivers for elderly relatives, and the elderly themselves, the Council educates people about the dangers of pollution and offers strategies to address its effects.

## District of Columbia

LIVING CLASSROOMS FOUNDATION — \$21,756

JOHN DILLOW, HENSON CENTER, 2000 HALF STREET SW, WASHINGTON, DC 20024

### *Environmental Education*

Many public school teachers in the District of Columbia (DC) are currently being asked to teach subjects that they are not familiar with or to eliminate class time for environmental science in order to focus on other curriculum requirements, such as reading. As part of the project, the Living Classrooms Foundation (LCF) has coordinated with the DC Environmental Education Consortium and the DC Public Schools to select 10 teachers in need of environmental education assistance. During the project, these teachers participate in two hands-on workshops; supplies, curriculum materials, and support are provided for all the workshop participants. Teachers who attend each workshop earn a corresponding field experience for their classes. The two workshops address river ecology and shad and herring restoration. At the close of the project, the teachers will meet with LCF to critique their experience with the project and discuss how it may have helped them bring environmental science into their classrooms.

## Florida

*See page 3 for a profile of a grant awarded to the Charlotte County School District by EPA Headquarters.*

SCHOOL BOARD OF BROWARD COUNTY — \$4,998

DEBBIE STASIW, 600 SOUTHEAST THIRD AVENUE, FT. LAUDERDALE, FL 33301

### *Environmental Protection Project at Driftwood Middle School*

This project involves establishing an outdoor classroom to support science and other academic activities. The outdoor classroom contains 10 large picnic tables, including one that is accessible for the handicapped, and is designed to facilitate hands-on learning experiences for students. The students plant native and non-native plants in three adjacent areas to attract butterflies, birds, and other species of wildlife. The students also develop research, writing, observational, critical-thinking, and other analytical skills. A Web site will be developed to display progress of the project.

UNIVERSITY OF FLORIDA — \$15,577

DR. NORM LEPLA, BUILDING 970, NATURAL AREA DRIVE, P.O. BOX 110110, GAINESVILLE, FL 32611-0110

### *Integrated Pest Management Toolboxes to Reduce Pesticide Use in Urban Communities*

Under this project, extension agents train homeowners to implement integrated pest management (IPM) in order to reduce the use of pesticides. Master Gardeners are University of Florida-trained volunteer teachers who serve as integral links between the public and extension agents. An "IPM Toolbox" contains hands-on training activities that improve the pest management decision-making skills of Master Gardeners. The project aims to assemble and distribute toolboxes to the 50 Florida counties that have not yet received them and to train extension agents who will in turn conduct Master Gardening training. Originally, the toolboxes were developed for extension agents working with Master Gardener programs. The toolboxes will also be used to enhance the existing Florida's Yards and Neighborhoods program, which includes homeowners in the 50 counties.



## Georgia

BOARD OF REGENTS OF THE UNIVERSITY SYSTEM OF GEORGIA ON BEHALF OF THE UNIVERSITY OF GEORGIA — \$19,120  
DR. JIM AFFOLTER, 2450 S. MILLEDGE AVENUE, ATHENS, GA 30605

### *Teacher-Training Web Site for the Georgia Endangered Plant Stewardship Network*

This project involves development of a Web site to serve as an integral component of a successful environmental education program created by the Georgia Plant Conservation Alliance in 1996. The Georgia Endangered Plant Stewardship Network is a teacher training program that emphasizes rare plants, threatened habitats, and conservation biology as a focus area for science education. The training program includes teaching manuals, lesson plans, science kits, slide shows and a newsletter. The training materials are placed on the Web site along with tools such as an interactive Lesson Planner that will facilitate use of the materials in classrooms across the state. Educators have first access to the Web site at a new teacher training workshop.

DEKALB COUNTY PARK AND RECREATION DEPARTMENT — \$5,000  
DAVE BUTLER, 1300 COMMERCE DRIVE, SUITE 200, DECATUR, GA 30030

### *Constitution Lakes Wetland Monitoring*

The intent of this project is to introduce students and teachers from urban schools to the value of wetlands, particularly in an urban environment, as well as wildlife habitat, water quality, and flood reduction. Students and teachers visit a wetland site and are provided with water quality test kits and other materials. The project is conducted using Project WET (Wonders of Wetlands) resources and Adopt-A-Wetland program techniques supplied by the Georgia Department of Natural Resources. The teacher training includes both classroom and field study. The community, which consists largely of a minority population, uses this information to address issues related to wetlands, wildlife, and water quality.

## Idaho

FRIENDS OF THE TETON RIVER — \$6,200  
LYN BENJAMIN, 36 LITTLE AVENUE, P.O. Box 768, DRIGGS, ID 83422

### *Teton River Watershed Education Program*

This program is establishing and implementing the Teton River watershed curriculum to increase elementary through high school students' awareness of the watershed and to enhance their critical-thinking skills with regard to environmental issues. The program participants, which include six teachers and their classes, are engaging in classroom learning experiences, field trips, and local watershed hikes. Members of the public also participate in the local watershed hikes, which are designed to educate participants about local watershed issues and encourage them to become involved in protecting their watershed.

## Illinois

*See page 3 for a profile of a grant awarded to the Center for Instruction, Staff Development and Evaluation by EPA Headquarters.*

LAKE MICHIGAN FEDERATION — \$5,000  
STEPHANIE SMITH, 220 SOUTH STATE STREET, SUITE 1900, CHICAGO, IL 60604

### *Great Lakes in My World*

Great Lakes in My World is a kindergarten through eighth-grade curriculum designed to teach students about the Great Lakes based on the core curriculum areas of science, social studies, and language arts. The project curriculum, which may be used by both formal and nonformal educators, is consistent with state learning standards for Illinois, Indiana, Michigan, and Wisconsin. The project originated with a 2002 environmental education award that was used to develop and evaluate the pilot curriculum.



LEWIS AND CLARK COMMUNITY COLLEGE — \$24,986  
 GEORGE BANZIGER, 5800 GODFREY ROAD, GODFREY, IL 62035

*Environmental Education Watershed Stewardship*

In this project, 35 middle and high school teachers as well as a select group of high school and college trainers participate in an engaging, hands-on watershed education experience that includes both laboratory and field testing. The teachers conduct tests on local watersheds and the high school students and college trainers lead trips to the watershed and oversee water monitoring by students. The objectives of the project include involving teachers in field experiences at watershed sites and using methods of scientific inquiry to monitor watersheds.

ST. CHARLES PARK DISTRICT — \$1,800  
 RENAE FRIGO, 8 NORTH AVENUE, ST. CHARLES, IL 60174

*Native Illinois*

The St. Charles Park District is developing a cross-curricular field trip program that combines elements of earth science with a social studies unit that covers American Indians. The program focuses on how American Indian communities use natural and ecological resources. The program is being coordinated with the district's third-grade curriculum.

## Indiana

ALLEN COUNTY SOIL & WATER CONSERVATION DISTRICT — \$4,570  
 ALLISON VAN ZANDT, 3718 NEW VISION DRIVE, FORT WAYNE, IN 46845

*Project WET: Water Education for Teachers*

This project funds Project WET training in Allen County, Indiana. Project WET is an international water science and education program for educators and students in kindergarten through grade 12. Project WET workshops train educators how to improve their teaching of water resource topics in their classrooms and make hands-on educational activities available.

CAMP FIRE USA INDIANA HEARTLAND COUNCIL — \$5,000  
 JEROME DELBRIDGE, 1410 SOUTH POST ROAD, INDIANAPOLIS, IN 46239

*WorldWise Summer Youth Program*

Through this program, 800 young people from low-income families are introduced to ecological concepts. The program consists of five units that focus on ecological topics ranging from energy cycles to ecosystems. In addition to learning about ecology, the young people address community issues by designing and implementing service projects that improve the natural environment. Key program partners include the Indiana Department of Environmental Management, the Indiana Department of Natural Resources, Keep Indianapolis Beautiful, and the Boys & Girls Club.

HEALTH AND HOSPITAL CORPORATION OF MARION COUNTY — \$14,000  
 ROBIN COSTLEY, 3838 NORTH RURAL STREET, INDIANAPOLIS, IN 46205

*Asthma Education for Low-Income Head Start Families*

This project expands current Head Start asthma screening and education efforts by focusing on high-risk pediatric populations. After an initial asthma screening is conducted, an asthma educator visits each Head Start family to devise a plan of care. Home visits also are conducted by indoor air specialists and public health nurses. The screenings and home visits result in fewer emergency room visits, increased participation in asthma education classes, and better preparation of families to recognize and address in-home asthma triggers.





INDIANA DUNES ENVIRONMENTAL LEARNING CENTER — \$5,000  
JOHN HAYES, 700 HOWE ROAD, PORTER, IN 46304

### *DuneSCOPES High School Program Expansion*

DuneSCOPES (Students Concentrating on Positive Environmental Science) has three goals: (1) engage high school students in monitoring ecological change, (2) link students together using special events and the Internet so that they can learn about each other and their communities, and (3) share information regarding environmental careers with students who are making choices about their future. The participation of high school students in the Chicago and northwest Indiana areas increases environmental stewardship activities and implementation of long-range projects that benefit the communities in the region.

## **Iowa**

HAMILTON COUNTY AGRICULTURAL EXTENSION DISTRICT — \$14,873  
DAVID N. BROWN, 735 2ND STREET, WEBSTER CITY, IA 50598-1436

### *Youth Environmental Agriculture Days*

The objective of the Youth Environmental Agriculture Days project is to demonstrate how agriculture impacts the environment and the health and safety of young people in rural areas. Youth Environmental Agriculture Days give fifth graders and their teachers the opportunity to participate in three environment-related and four agriculture-related educational sessions in a single day. These 25-minute sessions address the importance of water quality and groundwater, how people get food from farms, the positive and negative effects of the sun, biotechnology, how trees impact the environment, corn and soybean by-products, and how animal by-products are used in people's daily lives. The sessions are intended to teach students about how to keep water safe, how to avoid the harmful effects of the sun, the importance of trees to the environment, the value of various agricultural by-products in everyday use, and other matters.

HARTMAN RESERVE NATURE CENTER — \$5,244  
VERNON FISH, 657 RESERVE DRIVE, CEDAR FALLS, IA 50613

### *After School Program*

The After School Program provides after-school environmental education activities for elementary and middle school students both in their schools and at the Hartman Reserve Nature Center. The activities are conducted in partnership with the local Girl Scout and Boy Scout Councils. The objectives of the program are to expose students to local environmental issues, use these issues to develop the students' problem-solving and critical-thinking skills, and increase student achievement in core academic areas. Five hundred students in grades 6 through 9 at six middle schools in Waterloo and Cedar Falls, Iowa, participate in the program. The participating Girl Scouts and Boy Scouts are in grades 1 through 9 and live in the 12 counties in northeast Iowa served by the Conestoga and Winnebago Councils. The program uses activities from established environmental curricula, such as Project Wild; Project Learning Tree; Project WET; and IOWATER, a water quality testing program.





PROTEUS, INC. — \$25,000

TERRY MEEK, 3115 DOUGLAS AVENUE, DES MOINES, IA 50310-5307

### *Agribusiness Employers Conference*

The goal of the Agribusiness Employers Conference project in Iowa is to hold a statewide conference for 200 employers of Hispanic, immigrant, and migrant farm workers. The objectives of the project are to teach and update these employers about environmental regulations and issues pertaining to the workplace. A principal focus of the project is the health hazard posed by herbicides, pesticides, and other toxic substances to which workers may be exposed through skin contact, inhalation, and ingestion. The conference is intended to enhance the employers' decision-making skills with regard to safe work practices. At the conference, employers are provided with educational techniques and resources that they can use to conduct effective environmental education for their Hispanic, immigrant, and migrant farm employees.

## **Kansas**

*See page 4 for a profile of a grant awarded to the Kansas Association for Conservation and Environmental Education by EPA Headquarters.*

AMERICAN LUNG ASSOCIATION — \$6,433

LYNNE CRABTREE, 4300 SW DRURY LANE, TOPEKA, KS 66604

### *Removing Chemicals from the Classroom: Introduction to Rehab the Lab*

Under this project, teachers, maintenance staff, and administrators are educated about health threats posed by potential environmental pollutants in the school setting, such as hazardous chemicals stored in classrooms or maintenance areas. The project involves identification of old, unused chemicals that have been stored in science laboratories, maintenance shops, and art departments. If exposed to air or otherwise released into the school environment, these chemicals could cause significant breathing difficulties and other health problems for the people in the school. The project is intended to raise the awareness of school personnel, enable them to recognize potential chemical hazards, and teach them how to properly manage and dispose of chemicals.

BLUE RIVER WATERSHED ASSOCIATION — \$5,000

JOAN LEAVENS, 9824 BRIAR DRIVE, OVERLAND PARK, KS 66207

### *Teaching Rivers in an Urban Environment: The Blue River Watershed Project*

The goal of this project is to facilitate communication and networking among school-based water quality monitoring groups throughout the Kansas City metropolitan area in Kansas and Missouri. As part of the project, teachers and students communicate with other "stream teams" across school districts, municipalities, counties, and state lines. This communication occurs through an annual teacher evaluation and networking session called the Teacher Summit and through posting of stream data on a Blue River watershed map. For the project, the Blue River Watershed Association (BRWA) recruits, trains, and equips three teachers of kindergarten through grade 12 and 300 students in the Blue River watershed. Fifty teachers presently participating in the project are also involved in the Teacher Summit. BRWA's education director conducts project training for teachers, provides them with TRUE Blue Project curricular materials and equipment, and leads stream monitoring classes for students.

FRIENDS OF LEE RICHARDSON ZOO — \$1,000

KATHY SEXSON, 403 SOUTH 4TH STREET, GARDEN CITY, KS 67846

### *Wildlife Trade Teachers' Workshop*

The Wildlife Trade Teachers' Workshop project involves 55 teachers and reaches 1,000 students in grades 5 through 12. The teachers are invited to participate in a workshop about wildlife trade. The workshop uses materials from Windows on the Wild: Wildlife for Sale educator guides to introduce wildlife trade issues to teachers. The teachers then use what they have learned to integrate wildlife trade issues into their curricula. The wildlife trade information can be integrated into curricula for science and other subjects such as geography, math, and language arts.



JOHN DEWEY LEARNING ACADEMY — \$11,400  
DR. JAMES R. WHEELER, 620 E. WOODSON, LECOMPTON, KS 66050

### *Environmental Service Learning*

The goal of the Environmental Service Learning project is to integrate environmental education into local and state educational goals as part of the No Child Left Behind initiative. The objectives of the project are to: (1) integrate environmental studies into all curricular content areas (math, science, social studies, language arts, and vocational education), emphasizing Kansas's newly developed environmental standards; (2) develop a thematic curriculum focusing on "Connecting with Your Environment"; and (3) demonstrate how environmental education and service learning can be used to motivate students to complete high school and establish goals for the future.

KANSAS ASSOCIATION FOR CONSERVATION AND ENVIRONMENTAL EDUCATION — \$20,190  
LAURA M. DOWNEY, 2610 CLAFLIN ROAD, MANHATTAN, KS 66502-2743

### *Sprouting Waterspout Gardens in Kansas: Statewide Educator Workshops*

The Kansas Association for Conservation and Environmental Education (KACEE), in partnership with Green Topeka, is providing hands-on environmental education that focuses on development of a waterspout garden as a tool for both learning and community improvement. A waterspout garden is a planted area with a shallow indentation that collects and holds water, preventing it from reaching a storm drain. A waterspout garden can serve as both an outdoor learning space and a community awareness tool in that it shows how personal and community actions can reduce storm water runoff and the associated pollution. The project involves conducting a series of six workshops using existing national environmental education materials and waterspout garden curricula. The workshops take place throughout Kansas and target educators and neighborhood and community leaders. Workshop participants learn how to construct a waterspout garden and how to use it as a school and community educational resource. KACEE and Green Topeka make project-related presentations at environmental education conferences in Iowa, Nebraska, and Missouri.

NO TILL ON THE PLAINS — \$21,878  
BRIAN LINDLEY, P.O. BOX 379, WAMEGO, KS 66547

### *Friendly Farms*

The Friendly Farms project educates students, teachers, and the general agricultural community about the benefits of food production using a no-till cropping system and the importance of agricultural production methods that preserve the environment and conserve resources. One objective of this project is to expand the educational program of No Till on the Plains (NTOP) to reach 300 high school students and 10 teachers in Kansas with EPA's Stream Team curriculum. A second objective is to provide students with hands-on training in data and information collection through a comparative study of 10 no-till model farms and farmers and 10 traditional farms and farmers. The environmental benefits of no-till farming are documented to support development of a public education and promotion program designed to reach 10,000 people. The project delivers training through classroom instruction, farm visits (for on-site data collection), and Web-based approaches. Students participate in writing press releases, making presentations, and writing articles. Each team conducts educational sessions at the annual NTOP conference. In addition, NTOP is preparing a public education campaign to be conducted in print, on the radio, through presentations at conferences, and via the Internet.



## Kentucky

JEFFERSON COUNTY PUBLIC SCHOOLS — \$5,000

LARRY HAMFELDT, 3332 NEWBURG ROAD, P.O. BOX 34020, LOUISVILLE, KY 40232-4020

### *Outdoor Classroom Project*

This project supports development of an outdoor classroom at an elementary school within the public school district. The goal is to provide students with real-world experiences in order to reinforce the classroom curriculum. The outdoor classroom allows students to observe and experiment with living things and processes found in nature. Through hands-on activities such as planting, observing, recording observations of plants and animals, using and analyzing data, making predictions, performing experiments, and developing an ecosystem, the outdoor classroom concepts support both the school and state core curriculums.

MURRAY STATE UNIVERSITY — \$25,000

DR. JOE BAUST, 3201 ALEXANDER HALL, MURRAY, KY 42071

### *Model Environmental Education for Pre-Service Teachers*

The goal of this project is to provide 2-day environmental education workshops for the 360 undergraduate students making up the group of pre-service teachers at Murray State University. Hands-on, minds-on field experiences and interdisciplinary instruction are essential to environmental education because teachers and students are often disconnected from the environment. Six workshops each containing 60 pre-service teachers are being held in an outdoor laboratory setting. The workshops are led by current teachers. The workshops draw on programs such as Projects WET; WILD; Learning Tree; Food, Land, and People; and Outdoor Biological Instructional Strategies.

## Louisiana

LOUISIANA SCIENCE TEACHERS ASSOCIATION — \$12,500

JEAN MAY BRETT, 1627 TAYLOR STREET, KENNER, LA 70062

### *Project DEEDS (Developing Environmental Education Decision-making Skills)*

This project provides educators with the tools needed to help their students become better decision-makers regarding the environment. Learning strategies are being explored in 12, 6-hour workshops. Participants are taught to engage students in discussions of how their everyday decisions impact the environment; for example, a discussion might address environmental factors to be considered when purchasing a vehicle. At the end of the workshops, participants are able to identify and state a decision-making problem, identify viable options, research risks and benefits, make decisions based on rational methods, and present their decisions coherently and logically.

## Maine

MERRYSRING, INC. — \$4,500

KERRY HARDY, 30 CONWAY ROAD, P.O. BOX 893, CAMDEN, ME 04843

### *Environmental Education Modules*

Merryspring, Inc. partners with public schools in a three-county area to enhance their curriculums in natural science and ecology. The program takes students in kindergarten through grade 5 out of the classroom and into a natural setting to learn about local habitats and the plant and animal species native to this part of Maine.



UNIVERSITY OF MAINE — \$5,000

LAURA R. WILSON, 5717 CORBETT HALL, ORONO, ME 04469-5717

### *Education and Action Through Lake Leaders*

This program is an expansion of the Lake Leaders training. Over 250 lakefront landowners have received training about lake threats and lake protection methods. The program is providing additional training to more than 20 individuals in lake leadership, outreach, and water quality education methods. After the training, these individuals develop small-group proposals for better lake protection.

## **Maryland**

*See page 4 for a profile of a grant awarded to the Living Classrooms Foundation by EPA Headquarters.*

ANACOSTIA WATERSHED SOCIETY — \$5,000

ROBERT R. BOONE, THE GEORGE WASHINGTON HOUSE, 4302 BALTIMORE AVENUE, BLADENSBURG, MD 20710

### *River of Words*

With this grant, the Anacostia Watershed Society supports coordination, outreach, and educational efforts associated with the River of Words Poetry & Visual Arts Competition. River of Words is an acclaimed international poetry contest for children that is organized in affiliation with the Library of Congress Center for the Book and the International Rivers Network. River of Words is designed to help young people explore the natural and cultural history of the places where they live and express their discoveries in poetry and art. River of Words encourages students to visualize their connection to the river and express it through words and art. Students are encouraged to explore and understand their watershed using art literature to discover their place in the wider community while learning about regional history and local flora and fauna. The young people who participate represent a low-income neighborhood comprised of African-American and Hispanic residents.

ENVIRONMENTAL CONCERN, INC. — \$4,942

SUZANNE SLEAR, P.O. BOX P, TALBOT COMPANY, ST. MICHAELS, MD 21663

### *Wetland Youth Leadership Program*

The Wetland Youth Leadership Program empowers young people to take control of their future. By linking theory with practice while addressing important community issues, the program enhances student learning and civic awareness. The program uses hands-on, community-based learning to connect classroom and co-curricular experiences. In a 3-day course, students learn about wetlands through field explorations and activities drawn from a nationally respected wetland curriculum guide, “WOW! The Wonders of Wetlands” (WOW!). The students also learn visual presentation, speaking, and teaching skills, including how to organize a presentation, make it audience-specific, and handle challenging audiences. The students must organize and give a presentation about wetlands based on activities from “WOW!”

PARKS & PEOPLE FOUNDATION — \$21,377

JACQUELINE CARRERA, 800 WYMAN PARK DRIVE, SUITE 010, BALTIMORE, MD 21211

### *The KidsGrow Urban Ecosystem Education Program*

The KidsGrow Urban Ecosystem Education Program (KidsGrow) is being implemented in a low-income, underserved community with serious environmental problems. KidsGrow gives students the tools they need to help address environmental issues in their community, including illegally dumped trash, lead poisoning from lead-based paint consumption, contaminated rainwater runoff, and lack of trees and native plants. Rather than focusing on one environmental issue, KidsGrow attempts to provide students with a full understanding of urban ecology through integration of the social, physical, and biological sciences with examination of issues affecting air, water, soil, vegetation, and wildlife. The students participate in field trips, gain first-hand experience on the Chesapeake Bay, monitor local water quality, and partner with teacher and other school officials to promote mixed paper recycling.



SALISBURY UNIVERSITY — \$9,890  
 BETSY C. CORLEY, 1101 CAMDEN AVENUE, SALISBURY, MD 21801

*Lower Shore Child Care Resource Center*

The goal of this project is to minimize childhood exposure to environmental contaminants. The project offers childcare providers a comprehensive training program to help them better understand environmental contaminants, the contaminants' health effects on children, and ways to minimize exposures. The project also equips the providers with environmental health curricula and resources that they can use to educate children. By helping to minimize children's illnesses, the project aims to reduce the number of workdays lost by parents caring for ill children.

## Massachusetts

*See page 5 for a profile of a grant awarded to the Urban Ecology Institute, Inc. by EPA Headquarters.*

APPALACHIAN MOUNTAIN CLUB — \$10,200  
 DR. KENNETH KIMBALL, 5 JOY STREET, BOSTON, MA 02108

*The Mountain Watch Program*

The Appalachian Mountain Club (AMC) offers educational programs and workshops for the public. The Mountain Watch program educates the local community, students in New England schools, and members of the public visiting the AMC facilities in New Hampshire about the relationship between air pollution, climate variability, and their potential impact on the northeast's higher peaks.

COHASSET MIDDLE HIGH SCHOOL — \$4,855  
 JACK BUCKLEY, 143 POND STREET, COHASSET, MA 02025

*Building Assessment Tools for Monitoring Bacteria in the Gulf River and Cohasset Harbor*

This project enables students and teachers to further develop assessment tools for monitoring bacteria in accordance with an educational model for water quality monitoring. A summer institute engages students in investigations of community problems and trains the students to conduct these investigations in accordance with protocols. The students present their results to the public following the completion of the projects. The outdoor environment is used as the primary classroom.

NORTHEAST SUSTAINABLE ENERGY ASSOCIATES, INC. — \$7,355  
 CHRIS MASON, 50 MILES STREET, GREENFIELD, MA 01301

*Problem-solving Transportation Issues*

This project is expanding the Earth Smart Travel program by increasing the number, geographic range, and effectiveness of environmental education organizations that train teachers and that reach students directly. The project provides activities that involve students in evaluating the environmental impacts of their current transportation options and identifying earth-friendly means of transportation.

TENT CITY CORPORATION — \$4,800  
 ANGELA PERONDI PITEL, 359 COLUMBUS AVENUE, BOSTON, MA 02116

*Fuel Cell Education Program*

This program is implementing a fuel cell environmental education unit as part of the Boston Renaissance Charter School's eighth-grade science curriculum. Teachers attend a workshop to learn about the fuel cell technology and how to integrate it into their science curriculum. The teachers return to their classrooms to pilot this educational unit. Renewable energy resources, such as hydrogen fuel cells, offer solutions for environmental problems as well as economic opportunities. These resources have the potential to revolutionize the way energy is produced and used in our society.





THE WALDEN WOODS PROJECT — \$17,997  
DR. KENT CURTIS, 44 BAKER FARM, LINCOLN, MA 01773

### *Approaching Walden 2004*

The Walden Woods Project is expanding its successful teacher training seminars with Approaching Walden 2004, a project that targets public high school history, science, social science, and English teachers in Massachusetts to attend a 2 week seminar. The project uses the writings of Henry David Thoreau and the Walden Woods setting to create place-based lessons about the teachers' own communities and links those lessons to the state's learning standards.

TOWN OF AMESBURY — \$4,936  
KATHLEEN CROWLEY, 62 FRIEND STREET, AMESBURY, MA 01913

### *Citizen Scientist Project*

The Camp Kent Environmental Center and the Powow River Conservation Area conduct many programs throughout the year, such as a 6-week program for students in grades 3 through 8 and free monthly family programs. In the new Citizen Scientist project, children, teens, adults, educators, and families participate in hands-on, environmental science-related field observations. The participants collect local environmental data, which in turn gives the community a better understanding of flora and fauna species.

WESTPORT RIVER WATERSHED ALLIANCE, INC. — \$5,000  
GAY GILLESPIE, 1151 MAIN ROAD, P.O. Box 3427, WESTPORT, MA 02790-0703

### *Watershed Education Program*

Two components of this program, Adopt-A-Trout and the Dune Restoration Project, provide fifth-, seventh-, and eighth-grade students with interdisciplinary, project-based learning experiences while they make improvements in the ecological health of some of the natural habitats found in their own back yards. The project also hopes to develop and test new methods of assessment to measure student learning.

## **Michigan**

CALHOUN SOIL CONSERVATION DISTRICT — \$5,000  
TRACY BRONSON, 13464 PRESTON DRIVE, MARSHALL, MI 49068

### *Stream Ecology in Calhoun County Schools*

In this project, a Stream Ecology Workshop provides teachers in the Albion and Battle Creek School Districts with the knowledge, experience, and tools needed to instruct their students about stream ecology concepts, land-uses, water quality issues, and watershed science. As a result, students develop the critical-thinking skills required to investigate water quality issues in the local watershed. The students also develop a community service project to improve water quality and raise community awareness of the issues.

COPPER COUNTY INTERMEDIATE SCHOOL DISTRICT — \$24,756  
SHAWN OPLIGER, 809 HECLA STREET, HANCOCK, MI 49930

### *Developing Environmentally Informed Scientists, Educators, and Stewards for the Future*

In this project, Michigan Tech University students are recruited and trained to support two programs for elementary and middle school students: an after-school environmental science class and a forest and pond ecology field trip. Approximately 600 students in kindergarten through grade 8 participate in the environmental science class, and about 2,500 students complete the field trip. Pre-serve education and environmental engineering students conduct and facilitate the after-school program and field trips. University students gain valuable training and presentation skills while introducing young students to environmental careers. While on the field trips, educators are involved in modeling environmental education methods.



HIAWATHA INTERPRETIVE ASSOCIATION — \$2,500  
AUTUMN JAUCK, 400 EAST MUNISING AVENUE, MUNISING, MI 49862

#### *Raptor Education Project*

The Raptor Education Project increases the knowledge of 200 fifth-, sixth-, and seventh-grade students in Munising, Michigan about the effects of pollution, hunting, development, and deforestation on raptors. The students learn to make informed decisions about their own behavior when interacting with wildlife species and their habitats. Students display their knowledge at a Birding by the Bay Festival. The Montana Raptor Center is a key partner in the program.

## **Minnesota**

INITIATIVE FOUNDATION — \$10,000  
KATHY GAALSWYK, 405 FIRST STREET SE, LITTLE FALLS, MN 56345

#### *Healthy Lakes and Rivers Partnership Program*

This program is expanding the Healthy Lakes and Rivers Partnership program model to include new communities throughout the region. The program is designed to build the capacity of citizen leaders and local government officials to develop strategic water management plans as well as to help the public make informed decisions regarding the natural environment. The goals of the program are to provide opportunities for shoreline property owners to network, work cooperatively, learn from one another, and work toward healthier waters in Minnesota.

MINNESOTA STATE HORTICULTURAL SOCIETY — \$13,000  
VICKY VOGELS, 1755 PRIOR AVENUE NORTH, FALCON HEIGHTS, MN 55113

#### *Healthy Soil, Healthy Food-Healthy Me!*

In this program, children and their parents, teachers, members of the community learn that their health depends on the health of the environment and the educated choices they make about land and food. The “Healthy Soil” curriculum focuses on soil, worms, and composting, while the “Healthy Food” curriculum addresses the important role that insects play in pollination and in the planting of seeds for food crops. Program information is disseminated through classes, demonstrations, and articles in the “Northern Gardener” Magazine.

## **Mississippi**

CLINTON COMMUNITY NATURE CENTER ASSOCIATION, INC. — \$17,200  
NELLIE NEAL, 617 DUNTON ROAD, P.O. BOX 93, CLINTON, MS 39060

#### *Teacher Connectivity Model Project*

This project involves developing a working model for community-based teacher support in environmental education; embedding the model in central Mississippi for the next decade; and extending the Clinton Community Nature Center’s environmental resources to more schools, teachers, and students by presenting and using the model. The model is being documented in a handbook, sample “buddy kit,” brochure, Web page, CD, and PowerPoint presentation. The handbook explains the process of teacher connectivity and the use of “buddy kits” by those who organize and approve field trips and nature laboratories at the center. These materials are being distributed to schools and the community. The Web page makes this information available online. The CD and PowerPoint presentation contain targeted information for dissemination.





MISSISSIPPI FORESTRY COMMISSION — \$3,800  
HAROLD ANDERSON, 301 NORTH LAMAR STREET, SUITE 300, JACKSON, MS 39201

### *Environmental Education Workshop for Teachers*

Project Learning Tree (PLT), sponsored by the Mississippi Forestry Commission, the USDA Forest Service, and the Mississippi Forestry Association, is an unbiased, fact-oriented teaching program based on sound science. The program's goal is to teach students "how to think, not what to think" about environmental issues. The program focuses on pre-service teachers at major universities. PLT is correlated to the Mississippi education framework. PLT is implementing the program through a series of 6-hour workshops, each of which is attended by the 24 pre-service educators funded by the grant. Thus far, 233 educators have received the training and 280 additional educators are scheduled to receive the training. The educators receive PLT activity guides, high school curriculum modules, workshop supplies, and other educational resource materials.

## **Missouri**

AREA RESOURCES FOR COMMUNITY & HUMAN SERVICES — \$8,400  
DR. LAURA LAMBRIX, 4236 LINDELL BOULEVARD, ST. LOUIS, MO 63108

### *The Community Access to Environmental Education*

This project teaches community members about environmental health hazards for children. The purpose of this project is to equip families, students, and educators with the information they need to identify dangerous chemicals present in their environment. As part of the project, 30 students in three St. Louis public schools participate in the Minority Junior Science Investigators program to learn about environmental issues. In addition, 25 adults complete train-the-trainer workshops to establish a volunteer corps of environmental educators. The project participants share what they have learned with their peers and neighbors and thus expand the service area of the project.

METROPOLITAN COMMUNITY & ECONOMIC DEVELOPMENT CORPORATION — \$22,320  
SAMUEL MARSHALL, 2310 E. LINWOOD BOULEVARD, KANSAS CITY, MO 64109

### *The Ivanhoe Environmental Education*

The Ivanhoe Environmental Education project focuses on educating Kansas City residents about health issues associated with exposure to lead-based paint, asbestos, and household chemicals. The goal of this project is to teach the public how to avoid such exposure and how to properly dispose of household chemicals. The intention is to educate approximately 5,500 families by holding group forums and conducting experiential laboratory activities, teacher training sessions, and parent and community outreach. Each forum makes use of educational material produced by the Kansas City Health Department. The training raises public awareness of health issues posed by indoor environmental hazards, engages the participants in assessment projects that include hands-on activities, provides instruction in basic ecological principles, and identifies environmental issues facing urban communities.

MISSOURI DEPARTMENT OF AGRICULTURE — \$9,127  
MARLA YOUNG, P.O. BOX 630, JEFFERSON CITY, MO 65102

### *Jefferson City Farm Stewardship Field Day*

Under this project, fourth-grade students in the Jefferson City School District act as Missouri farmers for a day. They are asked to face the natural resource stewardship decisions that must be made to produce the ingredients of a favorite student food—pizza. The goal of this event is to forge a connection between the student participants and local water and soil resources, helping the students to understand the responsibilities of stewardship and informed decision-making. This educational activity reaches approximately 675 fourth-graders in the Jefferson City community. Following the event, the students are taught more about environmental stewardship using a curriculum called "Show Me Agriculture".



WORLD BIRD SANCTUARY — \$2,076

SUSAN ZIETLOW, 125 BALD EAGLE RIDGE ROAD, VALLEY PARK, MO 63088

*Educator Eco-Workshop*

The World Bird Sanctuary hosts a half-day Educator Eco-Workshop for local teachers of kindergarten through grade 12. This workshop provides the participants with the information and resources they need to teach their students about local environmental challenges and issues. Examples of topics addressed by the workshop and the resources include habit restoration, reintroduction of endangered species to habitats, monitoring of species population levels, and enrichment of ecosystems to enhance bird reproduction.

YMCA OF THE OZARKS — \$7,784

MARIAH HUGHES, ROUTE 2, P.O. BOX 240, POTOSI, MO 63664

*Enhancement and Expansion of the Environmental Education Program*

The project is intended to enhance and expand the existing environmental education program of the YMCA of the Ozarks. The YMCA places educational signs on roads, walkways, trails, and buildings at its facility and presents educational displays in its nature center and dining room area. These environmentally oriented interpretive materials enrich the natural experience of every visitor. In addition, environmental assessment equipment is made available for students and teachers to use in outdoor classrooms. Approximately 40,000 people participate in YMCA programs throughout the year. The environmental education program conducted by the YMCA offers multiple opportunities for students, teachers, and the general public to learn more about forestry, prairies, streams, ponds, and caves in their community.

## Montana

BOONE AND CROCKETT CLUB FOUNDATION — \$17,979

LISA FLOWERS, P.O. BOX 230, DUPUYER, MT 59432

*Sustaining the Source through Watershed Education Program*

The Rocky Mountain Front is a large region where controversies currently exist regarding land subdivision, public land access, oil and gas extraction, animal grazing, water use and quality, and other environmental issues. The Sustaining the Source through Watershed Education Program is a partnership of Blackfeet Community College, Montana Watercourse, the Pondera County Conservation District, the Blackfeet Conservation District, the De La Salle Blackfeet School, the Valier Public School, the Dupuyer Elementary School, and the Boone and Crockett Club. The program is a year-long endeavor to bring together junior high school students and teachers from three underserved communities so that they can explore watershed issues and conduct three local watershed restoration and enhancement projects. Students conduct community open houses to showcase their efforts and share their knowledge about the local watershed.

MISSOULA COUNTY PUBLIC SCHOOL DISTRICT #1 — \$5,000

DR. JIM CLARKE, 215 S. 6TH STREET WEST, MISSOULA, MT 59801

*Outdoor Environmental Education Program*

Missoula County Public School District #1 is partnering with the University of Montana School of Education and Missoula Outdoor Learning Adventures to conduct the Outdoor Environmental Education Program for sixth-grade students and to provide associated training for their teachers. The objectives of this program are to integrate environmental education into the public school curriculum, offer teachers environmental education training that focuses on specific environmental issues in the Missoula area, provide students with information about environmental careers and career development, and support environmental education capacity building in Montana.



MONTANA ENVIRONMENTAL EDUCATION ASSOCIATION — \$17,000

STEVEN ESHBAUGH, P.O. Box 7022, BOZEMAN, MT 59771

### *Environmental Education Certification Program*

The Montana Environmental Education Association and the University of Montana are developing an Environmental Education Certification Program for the state. The program's training initiatives lay the groundwork for the implementation of higher environmental education standards across Montana. As part of the program, a Certification Summit is held to provide organizations and individuals with the opportunity to demonstrate their attainment of certain benchmarks in environmental education excellence that are outlined in a Certification Rubric. The certification program also provides training for Assinibione-Sioux tribal members who conduct environmental education programs on the Fort Peck Reservation.

## **Nebraska**

EDUCATIONAL SERVICE UNIT #15 — \$20,930

PAUL M. EKBERG, P.O. Box 398, TRENTON, NE 69044

### *Invasive Species in Wetlands and Prairie Ecosystems*

Designed for teachers and students in Nebraska and Kansas, this project gives participants the opportunity to investigate the adverse impacts of two invasive species, Canadian geese and red cedar trees, on pond water quality and native prairie grasses. The participants propose possible solutions to these problems and implement approved solutions in a pond-prairie ecosystem in south-central Nebraska. Ten environmental research teams, each consisting of one teacher, four students, and one community member, visit the pond-prairie site to gather pertinent data about the effects of the large populations of Canadian geese and red cedar trees on environmental quality. All the data collected, interactive educational activities, and final assessments of the solutions implemented are placed on the Internet for use by teachers, students, and communities. School visits are conducted to provide project information and assistance. A total of 10 teachers and 40 students in grades 5 through 8 are invited to attend project workshops and participate in pond-prairie activities.

KEEP NORTH PLATTE AND LINCOLN COUNTY BEAUTIFUL — \$12,292

ANGELA KING, 715 S. JEFFERS, P.O. Box 313, NORTH PLATTE, NE 69103

### *Recycling Projects*

This project provides hands-on recycling, litter prevention, and water conservation activities for students. Teachers and their students visit recycling centers, and the students design gardens at their schools, as part of an environmental service project. As part of the project, the students explore waste handling techniques and study how today's waste management methods will affect future generations. Project workshops for teachers are conducted by Keep North Platte and Lincoln County Beautiful.

## **Nevada**

ENVIRONMENTAL LEADERSHIP — \$20,036

AMY GIFFIN, P.O. Box 10786, RENO, NV 89510

### *Leaders of Waste Reduction*

Since 1999, the goal of Leaders of Waste Reduction (LOWR) has been to encourage environmentally friendly purchasing, consumption, and waste disposal choices of the tens of thousands of Nevada students in kindergarten through grade 12. Grant funds are being used to provide a new population, the 16,500 Hispanic students in Washoe County schools, with information about the importance of waste reduction. LOWR produces and distributes posters detailing in English and Spanish the items that are recyclable in the county. Training and supervision are provided to student educators to help them implement the curriculum. Other activities include conducting educational workshops to English as a Second Language students and maintaining and expanding LOWR's Web site.



## New Hampshire

KEENE STATE COLLEGE — \$15,450

A. L. RYDANT, 229 MAIN STREET, KEENE, NH 03435-2001

### *Worms Go To School*

This project is introducing and establishing vermicomposting, which uses worms to break down organic material into compost, in secondary school settings by creating a core curriculum for grades 7 through 12 that combines vermicomposting with the National Geographic Standards. This curriculum is a natural extension of the elementary school curriculum that Keene State College developed under a previous EPA environmental education grant. Maintaining a worm bin provides students with hands-on experience in ecosystem management and helps them understand the physical and human dimensions of ecosystems.

## New Jersey

*See page 5 for a profile of a grant awarded to the Stevens Institute of Technology by EPA Headquarters.*

CAMP VACAMAS ASSOCIATION, INC. — \$5,000

MICHAEL FRIEDMAN, 256 MACOPIN ROAD, WEST MILFORD, NJ 07480

### *Environmental Awareness Project*

The goal of the Environmental Awareness Project (EAP) is to immerse Vacamas Academy students in a study of the Camp Vacamas environment that includes exploration of the indigenous plants and trees, wildlife, aquatic life, and insects. The students also explore potential threats to the area, both natural and manmade. EAP combines field studies with research and culminates in the creation of a nature trail at the camp and a Web site dedicated to the students' findings. EAP develops environmental stewardship by educating low-income and culturally diverse students about environmental issues in formal and nonformal settings and by encouraging the dissemination of environmental information.

COMITÉ DE APOYO A LOS TRABAJADORES AGRÍCOLAS — \$5,000

NELSON CARRASQUILLO, 4 SOUTH DELSEA DRIVE, P.O. Box 510, GLASSBORO, NJ 08028

### *Delmarva Environmental Education Program*

The purpose of the Delmarva Environmental Education Program is to empower agricultural workers to take an active part in addressing the pesticide exposure hazards that place them and their families at risk. The Comité De Apoyo A Los Trabajadores Agrícolas (CATA) is conducting the project in the Delmarva Peninsula. Project activities include providing extensive outreach to the migrant and immigrant Hispanic communities, performing an environmental assessment of the workers' living and working conditions, conducting educational workshops about pesticides and protective measures in which critical-thinking and decision-making skills are developed, and coordinating an evaluation of the project by its participants and staff. CATA has four pesticide educators, three of whom are Master Trainers.

FRIENDS OF PALMYRA COVE, INC. — \$21,014

CLARA RUVOLO, 1335 ROUTE 73 SOUTH, PALMYRA, NJ 08065

### *Friends of Palmyra Cove - Wetlands Education Program*

The goal of the Wetlands Education Program is to provide 240 college, secondary school, and elementary school educators with 12 training sessions on wetland ecology over a 12-month period. By engaging in this biodiversity study program, the participants learn how to define and identify wetlands, identify wetland plants and animals, characterize macroinvertebrates, and test water quality. The participants also develop an understanding of wetland restoration and remediation. The participants modify the training to provide their students with hands-on lessons about wetland ecology and its relationship to the local watershed, which encourages stewardship.



GREATER NEWARK CONSERVANCY — \$4,789  
ROBIN DOUGHERTY, 303-9 WASHINGTON STREET, NEWARK, NJ 07102

*Environmental Field Trips to Branch Brook Park, Newark, New Jersey*

The Greater Newark Conservancy is developing a program in which students in kindergarten through grade 3 in Newark, New Jersey, take part in an environmental education field trip to Monarch Meadow, a habitat established for butterflies in Essex County's Branch Brook Park. During the field trip, the students learn about the environmental resources that are available in their urban community and about such matters as the importance of trees, the preservation and restoration of habitats for birds and butterflies, and the need for open urban spaces. After learning about the vegetation in Monarch Meadow, which is selected and planted to attract butterflies, the students help to restore the park using plant plugs and seed balls and then participate in a literacy activity related to their meadow experience. The program fosters environmental stewardship by involving the students in restoration of an urban habitat to attract wildlife. This is an approach that has proven successful in giving students a sense of responsibility for their environment.

ROCKY SPRINGS WILDLIFE REHABILITATION CENTER, INC. — \$2,250  
DONNA A. FOX, P.O. BOX 141, BROADWAY, NJ 08808

*Our Wildlife Neighbors*

The Rocky Springs Wildlife Rehabilitation Center's "Our Wildlife Neighbors" program educates young people about coexisting with wildlife in their communities. The students learn how to respond to orphaned or wounded animals and how to deal with encounters with wildlife as the human population grows in Warren and Hunterdon Counties. The program consists of interactive presentations for students and scout groups in these counties.

SETON HALL UNIVERSITY — \$5,800  
MIRIAM LYONS-FROLOW, 400 SOUTH ORANGE AVENUE, SOUTH ORANGE, NJ 07079

*Master Classes in Environmental Studies*

Master Classes in Environmental Studies provides opportunities for both high school and Seton Hall University students to learn from experts about the current issues in the environmental field. The class instructors and presenters provide career development information and describe educational pathways to environmental careers. Four Master Classes of 20 to 30 students each are scheduled for the 2004-2005 academic year.

SETON HALL UNIVERSITY — \$8,775  
MIRIAM LYONS-FROLOW, 400 SOUTH ORANGE AVENUE, SOUTH ORANGE, NJ 07079

*Seton Hall University Sustainable Communities Roundtable*

The College of Arts and Sciences at Seton Hall University is launching the Sustainable Communities Roundtable, a model outreach program. The goal of the Roundtable is to educate the public about environmental and health issues in northern New Jersey. The program provides members of the community with access to the latest information about such issues. The Roundtable's participants include scientists, government officials, and representatives of community-based organizations and industry. During the roundtable's panel discussions, experts and a moderator present multiple points of view and recommendations regarding specific environmental issues that impact northern New Jersey. Roundtable topics include open space preservation in the face of urban and suburban sprawl, transportation and associated air pollution, and watershed management. Participants become better informed, better equipped to make responsible decisions, and are encouraged to become more involved in community efforts to address the issues. A pamphlet summarizing the key points discussed at the roundtable and identifying additional resources will be provided.





## New Mexico

HERITAGE RANCH INSTITUTE — \$13,900

JIM WINDER, 18330 HIGHWAY 27 NE, DEMING, NM 88030

### *Young Environmental Stewards*

The goal of this project is to infuse environmental education into the core subjects at middle schools in the Truth or Consequences, New Mexico School District. Teachers are designing 24 field trips and related studies to be used as innovative tools in middle school classes. The students learn about the fundamentals of resource management and gain a thorough knowledge of biotic and abiotic environments, resource use by various cultural groups, and the rates at which resources may be renewed or depleted.

## New York

*See page 6 for a profile of a grant awarded to the Natural History Museum of the Adirondacks by EPA Headquarters.*

AMERICAN LITTORAL SOCIETY — \$5,000

DON RIEPE, 28 WEST 9TH ROAD, BROAD CHANNEL, NY 11693

### *Junior Bay Ranger Program*

The Junior Bay Ranger Program is a career development initiative for middle school students in Brooklyn and Queens in New York City. The program promotes environmental stewardship and educates the students about environmental issues related to the preservation of Jamaica Bay. The students are encouraged to explore and investigate environmental issues as well as related careers through a series of workshops, field trips, and lectures. The students gain a greater appreciation for nature while learning about potential careers in the environmental field.

BROOKLYN BOTANIC GARDEN CORPORATION — \$5,000

KIRSTEN MUNRO, 1000 WASHINGTON STREET, BROOKLYN, NY 11225

### *The Water Conservation Initiative*

The Water Conservation Initiative provides assistance for development of school gardens as part of community planting projects. The long-term goal of the project is to help students and teachers in Brooklyn's underserved neighborhoods gain a greater understanding of the importance of water resources to the environment and of environmental stewardship. The focus of the project is to teach students what they can do to conserve water in their daily lives and communities. To implement this project, the Brooklyn Botanic Garden Corporation (BBG) is conducting an ongoing educational initiative for young people and their teachers. BBG is producing age-appropriate materials on water conservation for 600 students and 20 teachers and is providing water conservation kits to 10 classes that choose to create school gardens. The materials and kits help to link the students with community resources that can be used to help sustain the gardens. BBG's goal is to sustain the project beyond the grant period so that it becomes a continuing part of the organization's educational programming.

BUFFALO SOCIETY OF NATURAL SCIENCE — \$20,796

CHERYL SPENGLER, 1020 HUMBOLDT PARKWAY, BUFFALO, NY 14211-1293

### *Authentic Learning Communities*

The Authentic Learning Communities program is a partnership between the City of Buffalo School District and the Buffalo Museum of Science/Tifft Nature Preserve. This program uses the theme of natural and human communities as a unifying concept for environmental education. Combining examination of authentic specimens, research, problem-solving, and real-world experiences, the program engages students in an inquiry-based citizen science project that focuses on invasive species. The students' environmental literacy and stewardship are developed through use of new technologies, data collection, and study of current and past ecological health issues.



CITY PARKS FOUNDATION — \$22,486  
DAVID RIVEL, 830 FIFTH AVENUE, NEW YORK, NY 10021

*Green Girls*

Green Girls introduces seventh- and eighth-grade girls in East Harlem and the Bronx to career opportunities in the sciences and supports the girls' academic achievement. The City Parks Foundation in New York City provides these middle school girls with after-school, weekend, and summer activities to promote environmental stewardship. The Green Girls program encourages the girls to consider careers in the sciences, enriches their understanding of science by introducing the girls to successful female scientists who share their knowledge and love for the field. The program also exposes them to environmental and social issues that affect their communities. The girls also become familiar with New York City's educational resources and develop their critical-thinking, leadership, and teamwork skills.

CORNELL UNIVERSITY — \$21,671  
JEFF CORBIN, 120 DAY HALL, ITHACA, NY 14853

*Environmental Careers Skills Program*

The Environmental Careers Skills Program focuses on ecosystem protection. This program provides college students with the skills and knowledge they need to become better environmental stewards and to explore potential environmental careers. Program participants learn about field sampling techniques, study environmental issues, are introduced to environmental career paths, and learn leadership and team-building skills that improve their ability to work with others to protect the environment. In addition, students attend a 3 to 4 day training workshop that teaches them strategies for networking with professionals and their peers.

FRIENDS OF THE HIGH SCHOOL FOR ENVIRONMENTAL STUDIES — \$4,600  
M'LIS BARTLETT, 444 WEST 56TH STREET, NEW YORK, NY 10019

*Environmental Science Literacy Training Project*

The Friends of the High School for Environmental Studies (HSES) offers professional development programs for HSES teachers to increase their environmental literacy and understanding of environmental stewardship. These interdisciplinary programs are designed to help teachers feel comfortable in incorporating environmental issues into any subject area. HSES is implementing a project to support science literacy efforts as a means of promoting understanding of environmental issues. This project offers training to both English and science teachers through inquiry-based discussions of environmental readings that reinforce concepts taught in high school science classes.

HOFSTRA UNIVERSITY — \$5,000  
DR. RUSSELL BURKE, 144 HOFSTRA UNIVERSITY, 200 WEST LIBRARY WING, HEMPSTEAD, NY 11549-1440

*Hofstra University Environmental Education*

Diamondback terrapins are the most abundant reptiles at Ruler's Bar Hassock in the Jamaica Bay Wildlife Refuge. This project uses the ecosystem and factors that impact the interactions between the components of the ecosystem as a context in which to teach about ecosystem balance and management. The project offers the general public and high school teachers an opportunity to become involved in researching this problem. Teachers are encouraged to have their classes participate in volunteer activities around the refuge that comprise the study project. A university graduate student is coordinating volunteers to explore environmental education methods and pursue wildlife research.





OCEANSIDE SCHOOL DISTRICT — \$5,000  
ED WILENSKY, 3160 SKILLMAN AVENUE, OCEANSIDE, NY 11572

*Shipboard Marine Science In-Service Teacher Course*

This 30-hour, in-service course enables science teachers to improve their students' skills in collecting ecological data and it provides teachers with materials on marine science careers for their students. The course immerses participants in maritime experiences that they share with their students. The teachers become adept and share their training in measuring water temperature, density, transparency, depth, salinity, and pH; collecting plankton samples; and conducting other data collection activities. The course includes a field trip to a marine study area in the Oceanside estuary and a working trip on a fishing vessel.

PACE UNIVERSITY — \$12,095  
FRED ZALCMAN, 78 NORTH BROADWAY, E-HOUSE, WHITE PLAINS, NY 10603

*Power Scorecard and Education Outreach*

The Power Scorecard education program, a Web-based educational tool, is designed to empower consumers to buy cleaner, greener electricity supplies. Pace University, in partnership with local community organizations in Texas, conducts workshops through local roadmapping activities to make Power Scorecard educational resources available to retail electricity consumers. One purpose of the workshops is to build a network of partner organizations that will conduct grassroots education efforts to encourage consumers in their communities to purchase cleaner, greener, renewable electricity.

PROSPECT PARK ALLIANCE — \$5,000  
CAROL GIANGRECO, 95 PROSPECT PARK WEST, BROOKLYN, NY 11215

*Midwood Green Team Project*

The Prospect Park Audubon Center's Midwood Green Team Project engages 20 pre-teens in hands-on study, restoration, protection, and interpretation of Prospect Park's Midwood, a natural habitat. The project is intended to improve the development and implementation of ecological programs for underserved youth. Project participants design, produce, and install educational signage to encourage environmental stewardship among park visitors.

THE HORTICULTURAL SOCIETY OF NEW YORK — \$5,000  
JENNIFER KLOPP, 128 WEST 58TH STREET, NEW YORK, NY 10019

*GreenHouse/Green Team*

GreenHouse/GreenTeam is a career development project that educates inmates on Riker's Island, a correctional facility, about environmental issues and stewardship. The project participants learn about the environment as they develop skills in landscape design, installation, and maintenance. The project stresses environmentally sound systems of design as it helps the inmates develop an appreciation for the natural world. The inmates work in gardens, a greenhouse carpentry shop, and a classroom on Riker's Island to gain knowledge about ecology as well as plants and animal behavior. The Horticultural Society of New York works with the inmates both while they are incarcerated and after their release to help them develop the work skills and discipline they need to find and hold permanent jobs. After their release, GreenHouse/GreenTeam participants maintain public library gardens and design and install gardens as requested by public and private customers.



WORKFORCE INVESTMENT OF HERKIMER, MADISON AND ONEIDA COUNTIES — \$5,000  
ALICE J. SAVINO, 209 ELIZABETH STREET, UTICA, NY 13501

*Workforce Investment Board Science and Technology Education Partnership*

The Science and Technology Education Partnership (STEP) is an innovative pilot effort to provide hands-on, interactive environmental education for students in grades 9 through 11 who live in traditionally underserved areas of Utica, New York. The students learn about local brownfield sites and the interventions required to make the sites useful again to local communities. The program is designed to give students a sense of environmental stewardship and to assist them in their transitions from high school to college to careers. STEP supports efforts to increase the number of young people from disadvantaged families and at-risk neighborhoods who are pursuing careers in environmental science. The program provides both a summer learning experience and support during the school year to maintain students' interest in environmental science and improve their academic achievement.

WYCKOFF HOUSE & ASSOCIATION — \$12,095  
PHILIP FORSYTH, 5816 CLARENDON ROAD, BROOKLYN, NY 11203

*Wyckoff Farmhouse Community Demonstration Garden*

The goal of the project is to establish an organic market garden that serves as a dynamic community center for sustainable living. The garden is used to educate community members about issues associated with urban land use, food access, and the environment, with a focus on development of sustainable local food systems. Interns from local high schools and volunteers learn about sustainable organic gardening and related environmental issues. Garden staff members conduct free workshops on sustainable gardening and the environmental significance of urban agriculture that provide the participants with first-hand experience in sustainable food production.

## North Carolina

CENTER FOR AGRICULTURAL PARTNERSHIPS — \$23,500  
HEATHER CAVANAUGH, 1 WEST PACK SQUARE, SUITE 401, ASHEVILLE, NC 28801  
(PROJECT IN WASHINGTON)

*Hispanic Orchardist Integrated Pest Management Education Program*

Under this grant, 40 Hispanic orchardists in Washington State participate in integrated pest management (IPM) field training and group learning sessions. These hands-on sessions are conducted in Spanish and ultimately give the orchardists the knowledge and tools they need to adopt IPM practices and reduce their dependence on pesticides. The project funds 12 in-orchard sessions that focus on pest identification and scouting as well as classroom sessions that address pest mating disruption technology and low-risk insecticides and fungicides. The sessions consist of class discussions and orchard walks. The walks allow the orchardists to practice the techniques learned during class. The goal of the project is to provide orchardists with information about environmentally friendly pesticide alternatives.

HILLANDALE ELEMENTARY SCHOOL PTA — \$20,963  
NANCY SUNG, 2730 HILLANDALE ROAD, DURHAM, NC 27705

*Hillandale Outdoor Laboratory*

The purpose of this project is to create a sustainable program of environmental science education by involving all teachers and students in regular outdoor investigations on the school grounds of Hillandale Elementary School (HES). The 43-acre HES grounds include a 10-acre area designated as the "Hillandale Outdoor Laboratory," that harbors both deciduous and coniferous forest, a field undergoing succession, and a winding stream that is being developed as an outdoor classroom. An environmental education guide is being adapted to the school grounds and aligned with the North Carolina Standard Course of Study. This cross-curricular guide is being assembled by a selected team of teachers and introduced to the faculty during teacher workshops. The reformed curriculum is being piloted by all the teachers in HES during the school year and serves as a prototype for the entire school district.



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES — \$4,995  
 HOLLY B. DENHAM, 1611 MAIL SERVICE CENTER, RALEIGH, NC 27699-1611

### *Expanding Water Quality Education and Stewardship in North Carolina*

This project is expanding citizen water quality monitoring and stewardship programs into suburban and rural areas of North Carolina and is increasing public participation in water quality monitoring statewide. Seven regional Stream Watch Coordinators and four Adopt-A-Stream staff members facilitate two Project WET/Water Quality Monitoring training workshops for a statewide total of 22 workshops. In these workshops, each of which contain 20 people, the regional coordinators and Adopt-A-Stream staff members demonstrate the use of water quality monitoring kits to evaluate physical, chemical, and biological parameters.

## **North Dakota**

NORTH DAKOTA MULTI-COUNTY SPECIAL PROJECTS CONSORTIUM — \$10,768  
 JACK MAUST, 8850 18TH AVENUE NE, WILLOW CITY, ND 58384

### *Multi-County Habitat Project*

For years, various agricultural and environmental issues have been very controversial in North Dakota. The North Dakota Multi-County Special Projects Consortium creates understanding and cooperation among such organizations as agricultural agencies, the Pembina County Soil Conservation District, 4H Clubs, and scouting and hunting clubs. The Consortium's main goal is to train teachers about issues related to agriculture, conservation, water quality, and local economics. Educational tools are being developed, which participating teachers can use to instruct students about environmental issues that affect their local communities and economies.

NORTH DAKOTA PARKS AND RECREATION DEPARTMENT — \$2,350  
 DOROTHY JANE STREYLE, 1600 EAST CENTURY AVENUE, SUITE 3, BISMARCK, ND 58503-0649

### *Ecosystems and Stewardship Traveling Trunk Program*

The Ecosystems and Stewardship Traveling Trunk Program provides educators with a collection of hands-on educational tools that help students build a strong understanding of ecosystems and environmental stewardship. This statewide program has a strong community focus. The program greatly increases the North Dakota Parks and Recreation Department's ability to educate the public and students regarding state and local efforts to maintain and restore healthy ecosystems.

## **Ohio**

CAMP FIRE USA NORTHEAST OHIO COUNCIL — \$5,000  
 BARBARA SMITH, P.O. BOX 516, 516 LEFFINGWELL ROAD, CANFIELD, OH 44406

### *Environmental Education and Awareness Activities*

In this project, the Camp Fire USA Northeast Ohio Council teams up with neighborhood centers to bring environmental education activities to an after-school site on the east side of Youngstown, Ohio. Approximately 40 inner city youth learn about trees, forests, rainforests, earthworms, soil composition, threatened and endangered habitats, recycling, waste reduction, and the difference between landfills and dumps.



SENECA COUNTY GENERAL HEALTH DISTRICT — \$5,000

DEBORAH MAGERS, 71 SOUTH WASHINGTON STREET, SUITE 1102, TIFFIN, OH 44883

### *Home Sewage Treatment Education*

Through a series of home inspections conducted by the Seneca County General Health District, Clinton Township residents are being educated about the proper way to operate their home sewage treatment systems. A homeowner's guide on the subject has been developed, and homeowners are being taught about human health threats associated with pollution from malfunctioning septic systems. The guide provides tools to help homeowners make responsible decisions concerning the operation of their home sewage treatment systems.

YOUNGSTOWN STATE UNIVERSITY — \$25,000

JAMES SHANAHAN, ONE UNIVERSITY PLAZA, YOUNGSTOWN, OH 44555

### *Mahoning River Education Project 2004*

The Mahoning River Education Project is the outcome of an EPA sustainable development challenge grant. The project increases the awareness of middle school students regarding the importance of the Mahoning River to the region's future. As part of the project, 4,800 middle school students and 290 teachers are given the opportunity to engage in hands-on studies of the river's systems. Students at each middle school grade level focus on a theme, such as ecosystems; the water cycle; water quality; or land, rocks, and soil. Student activities and indicators are matched with Ohio's academic content standards by grade level.

## **Oklahoma**

BOARD OF REGENTS OF THE UNIVERSITY OF OKLAHOMA — \$9,886

LESLIE FLENNIKEN, 731 ELM AVENUE, ROOM 134, NORMAN, OK 73019

### *Public Participation Geographic Information Systems*

This project informs community residents about the benefits of developing and using a public participation geographic information system to address environmental issues and to encourage active participation in environmental policy decision-making at the state and federal levels. One goal of this outreach project is to create an awareness of the value of public geospatial information for community empowerment in relation to environmental issues. A second goal is to familiarize community residents with existing public databases and data-providing organizations. The final goal is that participants gain knowledge regarding the use of geographical information systems and its significance in advancing environmental justice in their communities. Presentations are held throughout the state of Oklahoma, several of which are conducted in American Indian communities.

ENERGY EDUCATION PARTNERSHIP, INC. — \$24,957

KEITH T. THOMAS, P.O. BOX 53127, OKLAHOMA CITY, OK 73152

(PROJECT IN WEST VIRGINIA)

### *Improving the Environmental Education Practices in West Virginia*

The Energy Education Partnership, Inc. (EEPI), serves as the coordinating agency for a 1-day coal seam natural gas (CSNG) education seminar. The seminar participants are science and environmental science teachers from middle and high schools in the Beckley and Princeton area of southern West Virginia. The objective of the project is to educate these teachers about the specific environmental impacts of CSNG exploration and production in southern West Virginia so that the teachers can accurately address this subject in their classrooms. Working with the West Virginia Department of Environmental Protection, EEPI conducts lectures and guides field trips in the CSNG fields of southern West Virginia. These activities advance the goals of the project by providing teachers with an understanding of the specific procedures used for CSNG exploration and production.



GREAT PLAINS RESOURCE CONSERVATION AND DEVELOPMENT ASSOCIATION — \$5,550  
LARRY WRIGHT, 1505 N. GLENN ENGLISH, WASHITA, OK 73632

*Reduce, Recycle, and Return to Beauty*

As part of this project, eight workshops are being conducted for the rural residents of an eight-county area as well as county commissioners and members of the Seven Indian Nations of the Southern Plains to encourage proper solid waste disposal and recycling in their respective communities. The goals of the workshops are to reduce the amount of solid waste going to local landfills by 2 percent, increase the number of residents participating in solid waste programs by 2 percent, and eliminate illegal dumping. About 80 percent of the residents in the eight-county district use a solid waste service. Students are encouraged to attend the workshops to learn about the importance of waste management and recycling. The workshops inform students on how they can start a recycling program at their school. Handouts are provided, and updated information is accessible for teachers, students, and the public on a newly redesigned Web site. Education regarding recycling and how to properly dispose of waste plays a key role in community waste management.

OPPORTUNITIES INDUSTRIALIZATION CENTER OF OKLAHOMA COUNTY, INC. — \$5,000  
HYDER HOPE HOUSTON, 400 NORTH WALNUT AVENUE, OKLAHOMA CITY, OK 73104

*Groundwater Area Protection*

The objective of this project is to inform teachers and non-formal educators about environmental issues, such as groundwater protection, to improve their environmental education skills. Workshops and school-based service learning activities are being used to achieve this objective. As a result, the educators are better equipped to teach their students and fellow community members about environmental issues. Several hazardous waste sites, including Superfund sites, are present in the community, and they can have impacts on area groundwater. A needs assessment was conducted in the area that revealed great public concern about issues related to the water supply, water quality, and environmental pollution. Opportunities Industrialization Center of Oklahoma County, Inc., which is conducting the project, aims to educate community members about what they can do during their daily activities to help ensure that area groundwater is not further contaminated.

## Oregon

*See page 6 for a profile of a grant awarded to Portland State University by EPA Headquarters.*

POLK SOIL AND WATER CONSERVATION DISTRICT — \$4,110  
JACKIE HASTINGS, 580 MAIN STREET, SUITE A, DALLAS, OR 97338

*Polk County Environmental Experience*

In this program, students in grades 1 through 8 participate in a 1-day outdoor classroom experience at the Delbert Hunter Arboretum, which is adjacent to Rickreall Creek. Teachers are provided with curriculum materials for natural resource study areas. After some classroom work, students move through stations where they test water quality, collect aquatic insects, model soil characteristics, and assess riparian health. The students gather data on site conditions and develop reports on their findings. The data collected is used by the Polk Soil and Water Conservation District to assess the health of the creek.

PORTLAND STATE UNIVERSITY — \$6,284  
PATRICK EDWARDS, P.O. BOX 751, PORTLAND, OR 97207-0751

*Increase Ability to Collect High Quality Monitoring Data*

The primary objectives of this project are to increase teachers' aquatic insect identification skills, allow them to practice and refine their data collection procedures, provide them with data collection equipment and insect identification books, and give them opportunities to verify data. The project is implemented through a 5-day workshop in which at least 15 teachers from four to six high schools participate.





WILLAMETTE RESOURCES AND EDUCATIONAL NETWORK — \$24,922  
 HOLLY McRAE, 751 SOUTH DANEBO, EUGENE, OR 97402

*Project Wetland Education Support and Training*

Project Wetland Education Support and Training (WEST) targets formal and nonformal educators of students in grades 3 through 8. WEST provides the educators with assistance and guidance for incorporating wetland curricula and hands-on activities into their instructional efforts. As part of the WEST program, teachers participate in two, 5-hour teacher training workshops that focus on the ecology of the West Eugene Wetlands. A week-long summer institute is held for 30 teachers, and the Willamette Resources and Educational Network's wetland education guide is provided online. The teachers are provided with support while they implement watershed-related activities in their classrooms and design lesson plans. The project includes a staff-supported wetland field trip and classroom presentations for 60 educators and about 1,800 students.

## Pennsylvania

FAYETTE COUNTY CONSERVATION DISTRICT — \$4,000  
 HEATHER KNUPSKY, 10 NICKMAN PLAZA, LEMONT FURNACE, PA 15456

*Fayette County Children's Water Festival*

The Fayette County Children's Water Festival is an educational event that teaches sixth-grade students from throughout the county about basic water concepts. Through hands-on exercises in a lively atmosphere, the students learn about such topics as surface water and groundwater; water's importance to all life; the role of the water cycle; the links between water, plants, wildlife, and soil; and the effects of human activities on water and all of nature.

MAST COMMUNITY CHARTER SCHOOL — \$9,574  
 CHRISTOPHER CICHONSKI, 1800 BYBERRY ROAD, PHILADELPHIA, PA 19116

*Storm Water Runoff and Biotreatment Design Project*

In this project, environmental science students evaluate the storm water runoff conditions at their school and design strategies to address contaminated runoff. In partnership with fellow students in visual communication classes, the science students create interpretive displays that present their findings regarding treatment of the contaminated runoff. With their newly developed interpretive skills, the science students work to heighten awareness of this important problem within the school and among its residential and commercial neighbors. The project engages the students in a complex environmental issue with competing demands—for example, the need for parking space as opposed to the need for green space—and helps them design a solution that balances these needs. The students learn to collect sound data that they can use to assess all sides of the question, and they learn to think creatively about possible solutions.

OWEN J. ROBERTS SCHOOL DISTRICT — \$8,471  
 WILLIAM RICHARDSON, ADMINISTRATION BUILDING, 901 RIDGE ROAD, POTTSTOWN, PA 19465

*Scientific Evidence of Wetlands Restoration Effectiveness*

This project gives 540 high school students and teachers an opportunity to scientifically evaluate the effects of wetland restoration techniques used at the Century Oaks Farm. The 250-year-old family farm was degrading the nearby wetland habitat of the Welkinweir Preserve through nutrient and sediment loading as well as through stream bank collapse caused by farm livestock. Working with the Green Valleys Association headquartered at the Welkinweir Preserve and the Penn State Cooperative Wetlands Center, the students and teachers collect field data, which provides scientific evidence of the effectiveness of the nutrient containment, buffer fencing, and buffer revegetation projects implemented at the Century Oaks Farm in 2002.





PITTSBURGH VOYAGER — \$11,815

BETH A. O'TOOLE, 1501 REEDSDALE STREET, SUITE 2001, PITTSBURGH, PA 15233

*Strengthening Teaching Competencies in Environmental Education*

This project aims to strengthen the environmental education competencies of elementary, middle, and high school teachers in Allegheny County by engaging them in three experiential workshops. These workshops explore how water quality is related to places, people, and other living things; foster awareness of and sensitivity to the county's environmental issues; demonstrate how local issues relate to Pennsylvania's environmental and ecological education standards; share techniques for integrating these standards into their curriculum; inspire consideration of public policy that impacts the environment and ecology in Pittsburgh; and model the types of hands-on activities and explorations that teachers can use in the classroom to promote deeper student understanding of environmental concepts.

THE SCHUYLKILL CENTER FOR ENVIRONMENTAL EDUCATION — \$12,151

TRACY KAY, 8480 HAGY'S MILL ROAD, PHILADELPHIA, PA 19128

*Manayunk Watershed Education & Protection Program*

As part of this program, 60 students in two middle schools in the Manayunk neighborhood of Philadelphia are participating in a series of watershed-related classroom sessions, field trips, and community outreach efforts as well as a hands-on watershed protection project. Through this environmental education experience, the students increase their awareness and knowledge of water quality issues and have the opportunity to improve the water quality of the Schuylkill River. Through such outreach efforts as storm drain marking and distribution of water use tip cards, the students become teachers and educate other students, family members, and members of the community about ways to change their behavior in order to protect their drinking water. The students are also mentored by local community groups during the stream cleanups.

THE VILLAGE OF ARTS AND HUMANITIES — \$7,200

KELLY B. TANNEN, 2544 GERMANTOWN AVENUE, PHILADELPHIA, PA 19133

*The Plot to Planet Environmental Footprint Project*

The Plot to Planet Environmental Footprint Project uses gardening and other hands-on agricultural activities to educate young people about local and global environmental issues and the connections between them. Approximately 200 children of ages 3 through 12 design, prepare, plant, maintain, and harvest vegetables from a large garden. Through their stewardship of this land, which was formerly an abandoned lot, and through their involvement in the details and processes of urban gardening, the participants develop a greater awareness of the complex, interconnected environmental issues facing their neighborhood and the rest of the world, including water and air pollution, soil erosion, solid waste management, and habitat loss.

## **Puerto Rico**

G WORKS INC. — \$20,844

GRETCHEN GUZMAN, STREET L-A-13 TORREMOLINOS, GUAYNABO, PR 00969

*From My Area to the World and Back*

In this project, teachers help students define local environmental problems. The students use the colossal Earth Balloon as a laboratory in which they develop environmental stewardship, problem-solving, critical-thinking, and decision-making skills. They also identify and assess the causes and consequences of local environmental problems and consider how those problems relate to worldwide environmental issues. In examining potential solutions to the problems, the students come to understand that environmental stewardship has both local and global ramifications.



## Rhode Island

SAVE THE BAY – \$24,789

MICHELLE McALPIN, 434 SMITH STREET, PROVIDENCE, RI 02908

### *Hands-on Field Science for Urban High School Students*

In collaboration with Central Falls and Newport's Rogers High School, this project educates biology students in grades 10 through 12 from low-income urban communities about the connection between their community and the environmental health of the Narragansett Bay estuary and its watershed. Because many of the students participating will not attend a 4 year college, the project is also intended to expose them to possible environmental education careers.

WOOD-PAWCATUCK WATERSHED ASSOCIATION – \$5,000

DENISE J. POYER, 203-B ARCADIA ROAD, HOPE VALLEY, RI 02832

### *Standardizing Water Quality Monitoring*

This project standardizes water quality monitoring protocols used by Rhode Island and Connecticut middle and high schools by providing a format for publishing data and supports teachers in their development of students' science skills. By enabling schools to collect water quality monitoring data in such a way that data comparisons can be made between schools across the states and region, the project enhances the students' sense of stewardship for their local water systems.

WOONASQUATUCKET RIVER WATERSHED COUNCIL – \$10,326

JENNIFER PEREIRA, 532 KINSLEY AVENUE, PROVIDENCE, RI 02909

### *Woonasquacket River as a Classroom*

Partnering with the Blackstone Valley River Project, this project provides training for about 30 elementary and secondary school teachers who teach students from low-income neighborhoods on how to integrate a river curriculum based on the Woonasquacket River watershed into their classrooms. The curriculum combines chemistry, biology, earth science, geography, language arts, and mathematics. The project also prepares teachers to educate their students about nonpoint source pollution and the importance of keeping the river clean.

## South Carolina

*See page 7 for a profile of a grant awarded to Clemson University by EPA Headquarters.*

CLEMSON UNIVERSITY – \$4,980

W. HOWARD BROWN, 300 BRACKETT HALL, CLEMSON, SC 29634-5712

### *Extreme Environment*

The purpose of this project is to provide environmental education opportunities for at-risk middle school students participating in the Community in Schools Program (CIS). The project arranges for students to participate in four weekend sessions at the RM Cooper Leadership Center in South Carolina. The students engage in a variety of outdoor activities, such as understanding soil horizons, testing water quality, and identifying and conducting research on trees and wildlife. Each session component has an indoor laboratory assignment that integrates computer technology. The activities are interactive and enjoyable, and they provide the students with learning tools that enable them to be more successful in school. Teachers also participate in a weekend program and benefit from pedagogical methodology of experimental learning.



EARTH FORCE, INC. — \$12,357  
 JASON A. SAKRAN, 266 MEETING STREET, CHARLESTON, SC 29401

### *Earth Force High School Expansion Project*

This project focuses on increasing the environmental training of high school educators in four South Carolina counties. The educators are trained to implement the Earth Force program within an existing standards-based curriculum. Educational materials and on-going support are provided to ensure successful implementation of the program in the schools. The cross-disciplinary nature of the program allows integration of environmental education into other areas of the curriculum. The program creates opportunities for young people to become involved in environmental conservation through both hands-on work and expression of their ideas. The expected outcome is that 250 high school students will design and complete an environmental project to help the local community.

## **South Dakota**

SOUTH DAKOTA DISCOVERY CENTER AND AQUARIUM — \$4,600  
 KRISTIE MAHER, 805 WEST SIOUX AVENUE, PIERRE, SD 57501

### *Wonders of Wetlands II - Teacher Education*

Wonders of Wetlands II is a collaboration between the South Dakota Discovery Center and Aquarium and the Pierre Indian Learning Center, a residential boarding school for at-risk Native American children in grades 1 through 8. This program equips Pierre Indian Learning Center and other reservation teachers with the knowledge, skills, and resources needed to incorporate wetland curricula into their classes. The training program exposes teachers to critical wetland issues, including health-related issues and groundwater contamination problems. After completing the training, the teachers develop lesson plans using activities from the Wonders of Wetlands II program. Continuing education credits are granted to the teachers when they complete their lesson plans.

## **Tennessee**

DISCOVER LIFE IN AMERICA, INC. — \$21,000  
 JEANIE HILTON, 1314 CHEROKEE ORCHARD ROAD, GATLINBURG, TN 37738

### *Connecting the Dots: Students Surveying Life Across America*

The purpose of this project is to host an environmental education train-the-trainer workshop for 10 high school teachers and 10 environmental educators with non-profit organizations. At the workshop, the participants learn about threats to biodiversity by collecting Eumycetozoa (slime mold) specimens at participating land conservation units in the area. These specimens are sent to a team of researchers who identify them and include the identification information in the Global Inventory funded by the National Science Foundation. Specific biodiversity threats to be covered in the workshop include how air and water pollution, habitat fragmentation, and the introduction of exotic species affect an ecosystem. The participants post their slime mold data and photographs on the "Hands on the Land" Web site. By accessing the Web site, the students involved in the Global Inventory and others are able to compare the various habitats and specimens found from the coast of Maine to the Arizona desert.



## Texas

AMERICAN YOUTHWORKS — \$16,381

PAUL BOND, 216 EAST 4TH STREET, AUSTIN, TX 78701

### *Traveling Bull Creek Wetlands Awareness Workshop*

American YouthWorks has developed the Traveling Bull Creek Wetlands Awareness Workshop to raise wetland, watershed, and water quality awareness in Austin and Round Rock area schools. The project is intended to promote environmental education in order to increase environmental stewardship. The project combines outreach tools with educational materials, such as a working wetland model that shows the dynamics of a wetland. The model makes meaningful connections between everyday lifestyles and their impacts on wetlands, watersheds, and water quality. The model also shows people how they can lessen these impacts to benefit the environment.

CENTER FOR RESPONSIBLE ENVIRONMENTAL STRATEGIES — \$15,000

EDWARD SELIG, P.O. BOX 27884, AUSTIN, TX 78755-7884

### *Reducing Water Use Along the Border*

People living along the Texas-Mexico border are the focus of a campaign aimed at reducing water use. Community leaders receive instruction in how to protect their water supplies, including instruction in recognizing water sources, reducing water consumption, encouraging water conservation, and addressing impacts on water quality. In addition, youth groups, parent-teacher associations, and schools are asked to participate in community events, such as water conservation workshops and exercises. The Texas Education Agency's Region 1 Education Service Center and school librarians work with teachers to integrate campaign strategies into classroom curriculums using the Texas Essential Knowledge and Skills guidelines.

KEEP TEXAS BEAUTIFUL, INC. — \$17,700

STACY CANTU, 1524 SOUTH IH-35, SUITE 150, AUSTIN, TX 78704

### *Stop Trashing Texas - It's the Law*

The goal of Keep Texas Beautiful, Inc. (KTB) is to implement Stop Trashing Texas - It's the Law, an illegal dumping educational program. KTB engages its statewide network of community affiliates to promote workshops held in geographically and economically diverse areas of Texas in order to support elimination of illegal dumping. KTB's efforts concentrate on law enforcement personnel, such as code enforcement officials, police officers, and sheriff's office representatives. This program gives law enforcement personnel the opportunity to attend workshops and gather training tools and resource materials that can be used to support community enforcement efforts with the ultimate goal of eliminating illegal dumping in Texas.

NATIONAL WILDLIFE FEDERATION — \$17,000

MARYA FOWLER, 44 EAST AVENUE, SUITE 200, AUSTIN, TX 78701

### *Earth Tomorrow*

The project initiates Earth Tomorrow, an interdisciplinary, after-school and summer program in environmental education and leadership for under-served high school students. The goal of the project is to address the environmental education and leadership needs of today's young people by increasing their environmental literacy. This is being accomplished by means of teacher training to align after-school enrichment with classroom instruction, field trips, career mentoring in the environmental sciences, and a 5-day residential summer institute at a local university. At this institute, students, teachers, and community leaders have the opportunity to explore the environmental sciences through field trips, hands-on data collection and analysis, discussions with environmental professionals, and planning for a community action project.



NATURE HERITAGE SOCIETY — \$15,000  
GLENN MILLER, 4103 BRISBANE STREET, HOUSTON, TX 77047

#### *American Naturetum Initiative*

This project is intended to help public schools and the Texas Education Agency develop environmental education curriculums for urban students that encourage greater student achievement under statewide standardized testing protocols. During project field trips, over 500 students, 30 teachers, and park professionals are exploring natural science history as well as new technologies in order to encourage the students to consider environmental careers. The Nature Heritage Society is partnering with the Houston Independent School District and the City of Houston Parks and Recreation Department to implement the project. Through community-based nature education and exposure to the local natural landscape, urban students are being taught how their actions impact the environment.

TEXAS SOUTHERN UNIVERSITY — \$15,100  
LAURA SOLITARE, 3100 CLEBURNE STREET, HOUSTON, TX 77004

#### *Environmental Education for Environmental Justice*

The goal of this project is to educate local residents and community leaders about environmental justice, environmental planning, and urban revitalization issues through six interactive, hands-on workshops. The workshops give the participants a basic understanding of environmental systems and the regulations that frame the field of environmental planning. In particular, the workshops focus on water issues, municipal solid waste, and contaminated land. The workshops also examine how local residents and community leaders can help achieve environmental justice in their communities.

## **Utah**

*See page 7 for a profile of a grant awarded to the Four Corners School of Outdoor Education by EPA Headquarters.*

SNOW COLLEGE — \$16,000  
MICHAEL T. BENSON, 150 EAST COLLEGE AVENUE, EPHRIAM, UT 84627

#### *Nature High Environmental Education Summer Program*

Students attending Snow College's Nature High Environmental Education Summer Program learn about environmental issues at the Great Basin Environmental Education Center. The students also become better informed about career opportunities in environmental science and agriculture. The program teaches the students through use of structured lesson plans; applied field work; practice in sampling techniques; and hands-on demonstrations by professional scientists, who also instruct the students about the academic qualifications needed for careers in environmental and agricultural agencies. One purpose of the career training is to connect agency professionals who can serve as mentors to high school students from underserved communities. These mentors can assist students in developing future career goals and in identifying job opportunities in the environmental and agricultural fields.

UTAH FEDERATION FOR YOUTH INCORPORATED — \$5,000  
JACK WILBUR, 350 SOUTH 400 EAST, #G-4, SALT LAKE CITY, UT 84111

#### *Watershed Program & Events*

Utah Federation for Youth Incorporated (UFY) is working in partnership with the Utah PTA Health Commission to facilitate an Environmental Education (EE) Week modeled on the Red Ribbon Campaign for Drug Prevention. A week of education and activities called the "Healthy Communities, Healthy Kids" Campaign (HCHK) will incorporate the Utah Governor's new Watershed Initiative. UFY will work with project partners to facilitate a model watershed education program for the state of Utah. It will include educational activities, curriculum resources, and an evaluation process, and will be delivered to PTA Presidents and Health and Safety Commissioners throughout Utah.



UTAH SOCIETY FOR ENVIRONMENTAL EDUCATION — \$18,000  
JENNIFER VISITACION, 350 S. 400 EAST G#4, SALT LAKE CITY, UT 84111

### *Utah Multicultural Environmental Education Capacity Building Project*

The Utah Society for Environmental Education recognizes that outreach and education for underserved communities are essential for community-based environmental stewardship programs. The Utah Multicultural Environmental Education Capacity Building Project seeks to use regional training programs for formal and nonformal educators to promote knowledge and understanding of environmental education and to encourage use of the techniques needed to work with underserved populations. In addition, these training programs support capacity building efforts by facilitating communication, providing networking opportunities, and offering community leadership development.

## Vermont

NATIONAL WILDLIFE FEDERATION — \$24,143  
JEAN SEMPREBON, 58 STATE STREET, MONTPELIER, VT 05602

### *Habitat Stewards: Building Community-level Ecological Stewardship*

This project is a community-wide education initiative that provides community members, teachers, students, and administrators with opportunities to contribute to healthy wildlife habitats by becoming stewards of their local environment. A 3-day workshop trains 25 community volunteers to educate and assist other residents in the creation and restoration of wildlife habitat. Two local persons are trained as hosts, who are qualified to facilitate the Habitat Stewards workshops.

UNIVERSITY OF VERMONT STATE AGRICULTURAL COLLEGE — \$5,447  
SARAH COOLEY, 340 WATERMAN BUILDING, BURLINGTON, VT 05405-0160

### *Summer Work and Learning Program*

This project is taking a successful job training program for teens based on sustainable agriculture into its next phase of career development, namely the growing of vegetables and selling them at a local farmers' market. The main goal of the project is providing employment for young people that will allow them to develop teamwork, leadership, decision-making, and problem-solving skills that can be transferred into the workforce.

## Virginia

*See page 7 for a profile of a grant awarded to the Virginia Department of Environmental Quality by EPA Headquarters.*

CAMP KUM-BA-YAH, INC. — \$8,300  
JEAN F. CLEMENTS, 4415 BOONSBORO ROAD, LYNCHBURG, VA 24503

### *Environmental Education at Camp Kum-Ba-Yah*

Camp Kum-Ba-Yah offers a quality environmental education program to local community schools. Students participate in a full day of outdoor field studies, observing nature, participating in group activities, and experiencing firsthand the issues and problems confronting their community with regard to protecting and preserving the rapidly shrinking natural habitat. The program is designed to accommodate up to 60 students per day. Students are divided into small groups and rotate through three 90-minute courses selected from a six-course curriculum. Following the field activities, each class receives follow-up materials that ask the students to identify one of the issues they learned about, study possible solutions, and explain how they could be actively involved in implementing those solutions. Results are shared with all the participating schools to encourage collaborative involvement in activities pertaining to protection and preservation of the environment.





HOFFLER CREEK WILDLIFE FOUNDATION, INCORPORATED — \$17,150  
 RANDI STRUTTON, 505 WASHINGTON STREET, PORTSMOUTH, VA 23704

*Watering the Watershed: Interpretation of Low-Impact Development Technologies*

The Watering the Watershed program addresses the broad issues of water conservation and restoration of the Chesapeake Bay by demonstrating specific applications of sustainable development. The full program involves installing pervious pavement in parking areas and constructing rainwater collection facilities at the Hoffler Creek Wildlife Preserve, a 142-acre riparian forest; producing interpretive signage and literature illustrating how these systems benefit the watershed; promoting the systems by hosting a special open house; and equipping volunteer guides with materials and training so that they can explain how these models of low-impact technology help to protect watershed resources. The preserve hosts many field trips for local school groups, exposing the students to the preserve's low-impact technology solutions for watershed management. The grant funds the interpretive components of the program.

## Washington

BRYANT ELEMENTARY SCHOOL PTA — \$5,000  
 JULIA JONES, 3311 NE 60TH STREET, SEATTLE, WA 98115

*Water Quality Survey of Ravenna Creek*

The goal of this project is for Bryant Elementary School teachers and students to gain a better understanding of the condition of Ravenna Creek. The participants first have a 4-day stay at the Island Wood Residence and then participate in a year-long community service project. During this project, the participants collect and analyze samples from Ravenna Creek to assess the quality of the creek water. Island Wood faculty members provide curriculum consultation and an orientation workshop for the teachers to help them plan individual class projects. The students post the results of their water quality analysis on the school Web site and present their findings at a summit meeting.

DAYTON SCHOOL DISTRICT #2 — \$3,200  
 DOUG YENNEY, 609 S. SECOND STREET, DAYTON, WA 99328

*Best Management Practices in the Dayton Area*

This project addresses two essential questions: what practices are local agricultural producers using to protect soil and water resources, and how can the effectiveness of these practices be measured? The Dayton School District teaches 120 high school students about the effects of local agricultural conservation practices using project-based learning. The students hear agricultural producers talk about best management practices (BMP), and then the students design a test of the effectiveness of the BMPs in protecting soil and water resources. The project also includes five field visits over a period of 1 year; during these visits, the students conduct field measurements and testing. In addition, the students collect water quality data along the Touche River every 2 weeks. The students analyze their findings, write reports, and present them to local growers.

EAST VALLEY SCHOOL DISTRICT #361 — \$4,453  
 GEORGIANNE DELGADILLO, 12325 EAST GRACE AVENUE, SPOKANE, WA 99216

*Fish Tales*

This project involves approximately 180 middle school science students and five teachers in a study of rainbow trout, one of the key species inhabiting the Spokane River. The students learn about the life cycle of the rainbow trout and evaluate the river's capability to sustain the trout population. The teachers receive training in use of sampling equipment and in the curricular elements of the project. The students participate in classroom activities, visit a fish hatchery to see and handle rainbow trout, and participate in extensive field activities to study the Spokane River habitat. They present their findings using a variety of methods, including posters, oral presentations, and research papers.



FRANKLIN CONSERVATION DISTRICT — \$22,645  
HEATHER WENDT, 1620 ROAD 44 N, PASCO, WA 99301

### *Salmon in the Classroom Program*

This is a joint program between the Franklin and Benton Conservation Districts. The program's goal is to educate students and the public about local water quality issues and their effects on salmon. As part of the program, students raise salmon from eggs in the classroom and then release the fry into the Yakima and Columbia Rivers. Under this grant, an additional 11 4th- through 12th-grade classes are participating in the program. Teachers use the Salmon in the Classroom curriculum to educate the students about salmon and the environment. Conservation district personnel visit the participating classes to help them with their projects as well as water quality testing.

NATIONAL WILDLIFE FEDERATION — \$23,485  
GRETCHEN MULLER, 418 1ST AVENUE WEST, SEATTLE, WA 98119

### *Development of Five Schoolyard Habitat Sites*

The National Wildlife Federation (NWF) is assisting five elementary schools in the development of NWF-certified outdoor learning classrooms called Schoolyard Habitats. These classrooms provide the essential habitat elements of food and shelter and serve as places where wildlife can live and raise offspring. Through a series of educator workshops and field visits, teachers learn how to best configure, plant, and use the outdoor classrooms. Through educational activities, the students are involved in the design of the habitat and the selection of appropriate plant species. The classrooms are designed to enhance students' interest in the environment and to give them hands-on outdoor lessons in protecting and conserving wildlife habitat.

OLYMPIC PARK INSTITUTE — \$5,000  
SCOTT SCHAEFFER, 111 BARNES POINT ROAD, PORT ANGELES, WA 98363

### *High School Advanced Field Science Program Scholarships*

The purpose of this program is to expose high school students to real science in order to encourage them to pursue a career in environmental science. The program is based at the Olympic Park Institute in the Olympic National Park. Six scientists work with three groups of eight students in an intensive 8-day study of the scientific method. Topics covered through lectures, demonstrations, and hands-on teaching in the field include wildlife and fishery biology, forest ecology, watershed health, and native and invasive plant ecology. The students complete scientific investigations and write research papers.

PORT TOWNSEND MARINE SCIENCE SOCIETY — \$13,735  
CINAMON MOFFETT, 532 BATTERY WAY, PORT TOWNSEND, WA 98368

### *Onshore-Offshore: Marine Ecology for Teachers*

Onshore-Offshore is a professional development program for teachers. The program offers teachers hands-on, inquiry-based, science education skills that are transferable to their classrooms. The program includes a week-long residential workshop for 24 kindergarten through 12th-grade teachers. The teachers work alongside research scientists both onshore and at sea to formulate research questions. Based on these questions, the teachers design inquiry-based mini-research projects. They then evaluate the results of their data gathering under the direction of scientists and educators, who also provide the teachers with examples of curricula that are suitable for classroom use. The offshore sessions are conducted on a University of Washington vessel and a historic schooner. Through these sessions and a series of lessons, teachers are prepared to return to their classrooms and teach inquiry-based science.



RAINSHADOW NATURAL SCIENCE FOUNDATION — \$4,900  
BOB BOEKELHEIDE, P.O. BOX 3007, SEQUIM, WA 98382

### *Dungeness River Studies*

This project provides hands-on field experiences in science for fourth- and fifth-grade students (including home school students) in the northern Olympic Peninsula. The focus of the project is to instill students with an interest in science careers and to educate the students and public about protection of at-risk watershed resources, an important community issue. The students monitor specific physical and chemical characteristics of the Dungeness River while learning about the importance of consistent monitoring and accurate and reliable data collection. The Rainshadow Natural Science Foundation compiles all the data collected by the students, and the results are distributed through displays at the Dungeness River Center, a student presentation for the public, the Foundation newsletter, and river and partnership Web sites, including the National Audubon Society, Olympic Peninsula chapter, and the Jamestown S’Klallam Tribe.

WENATCHEE SCHOOL DISTRICT #246 — \$10,146  
JEANINE BUTLER, 235 SUNSET AVENUE, WENATCHEE, WA 98801

### *Wenatchee School District Science Field Experience*

Under this grant, the Wenatchee School District is conducting a region-specific field experience for all of its first-grade students that focuses on protection and conservation of the remaining shrub-steppe habitat in eastern Washington. The project provides in-service training for 24 first-grade teachers to increase their knowledge of botany and enhance their instructional skills. The teachers provide instruction to 555 students over a 2-month period using the school district’s botany curriculum. Classroom instruction is complemented by a field trip during which students observe, measure, and write descriptions of native shrub-steppe plants.

## **West Virginia**

FRIENDS OF CHEAT, INC. — \$3,232  
KEITH PITZER, 119 S. PRICE STREET, KINGWOOD, WV 26537

### *Acid Mine Drainage Awareness Education Program*

This grant supports development of an Acid Mine Drainage (AMD) Awareness Education Program for 32 students at Preston High School, 50 students at Bruceton School, 60 Boy Scouts, and 53 4H members. This program provides the participants with a thorough understanding of water quality issues, water sampling, AMD, and the importance of restoring the Cheat River to health as a waterway. In addition, the program provides guided tours of the AMD Interpretative Trail in Preston County to educate the public about the impacts of coal mining on the Cheat River watershed and what is being done to restore the Cheat River to its original state.

## **Wisconsin**

BIODIVERSITY PROJECT, INC. — \$10,000  
JANE ELDER, 214 NORTH HENRY STREET, SUITE 201, MADISON, WI 53703

### *Great Lakes Public Education Initiative*

In this project, Biodiversity Project, Inc., hosts a 2-day, retreat-style meeting of representatives from leading organizations and agencies engaged in public environmental education related to the Great Lakes. The participants in the meetings share lessons learned from a pilot public education campaign conducted in Wisconsin. The participants also collaborate in planning an expanded regional public education campaign regarding Great Lakes topics and build partnerships to implement the campaign.



UNIVERSITY OF WISCONSIN-MADISON — \$24,288  
 DR. ELIZABETH McCANN, 1207 SEMINOLE HIGHWAY, MADISON, WI 53572

#### *Classroom Support for Environmental Inquiry on School Grounds*

In this project, arboretum staff members from the University of Wisconsin-Madison help students learn how to think and act like scientists. The staff members accomplish this by providing in-class support to kindergarten through 12th-grade teachers while they engage their students in inquiries related to ecological restoration on school grounds. The cornerstone of the project is a 2-week, multidisciplinary summer institute at which teams of teachers learn about loss of biodiversity and the process of ecological restoration. Teachers learn how to teach this process to their students through hands-on activities. The teachers are provided access to an online forum to discuss successes and share advice with other participants.

UNIVERSITY OF WISCONSIN-STEVENS POINT — \$5,000  
 ANNA HAINES, 800 RESERVE STREET, STEVENS POINT, WI 54481

#### *Land Use Environmental Education: Planning for the Future*

Under this project, master's degree students have the opportunity to sign up for an online course in land-use environmental education. The course introduces current and aspiring educators to the concepts, issues, ideas, and available resources related to land-use, and facilitates the students' adaptation and creation of environmental activities and lessons for specific land-use topics. This is the first online course offered on the topic of land-use management. Additionally, presentations about the innovative project are being delivered to educators at conferences.

## **Wyoming**

TETON SCIENCE SCHOOL — \$4,928  
 DR. DOUG WACHOB, P.O. Box 68, KELLY, WY 83011

#### *Connecting People to Water through Education and Research Program*

The Teton Science School, in collaboration with the Wyoming Department of Environmental Quality, is promoting appreciation of Wyoming's water resources through watershed awareness, teacher education, and research programs. The program objectives are to foster knowledge of Wyoming's water resources through watershed awareness initiatives, provide teacher training with a focus on watersheds and water quality, and promote career opportunities in the environmental sciences among students in grades 7 through 12.

WYOMING ASSOCIATION FOR ENVIRONMENTAL EDUCATION — \$6,622  
 SUSAN R. MCGUIRE, P.O. Box 11246, JACKSON, WY 83002

#### *Environmental Education Capacity Building in Wyoming*

The Wyoming Association for Environmental Education (WAE) promotes quality environmental education programs across the state. As a non-profit state affiliate of the North American Association for Environmental Education, WAE is conducting the project as the first necessary step in building the capacity of Wyoming's environmental education profession. The goals of this project are to identify new environmental education leaders, create a communication network among environmental education professionals, evaluate the status of environmental education programs in the state, and create a statewide strategic plan for environmental education for the next 3 to 5 years.



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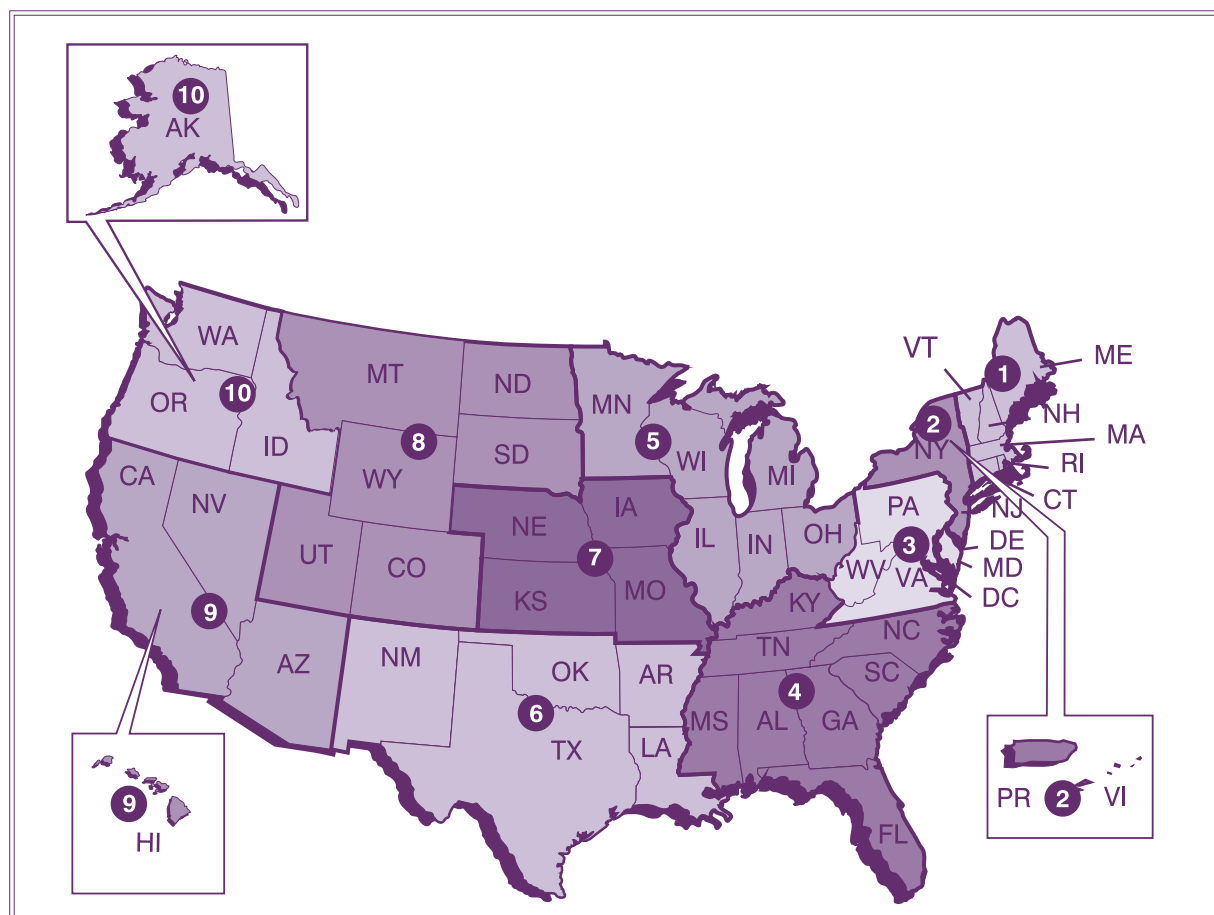


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